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SAS® OnDemand for Academics

Student User's Guide

Third Edition

SAS® Documentation

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CHAPTER 1

Introduction to SAS OnDemand for Academics

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Server Software - SAS Enterprise Miner *2*
Server Software - SAS Forecast Server *2*
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Introduction

SAS OnDemand for Academics provides an online delivery model for teaching and learning data management and analytics. By connecting to a server that is hosted by SAS over the web, users access the analytical power of SAS software through a user-friendly, point-and-click interface.

These are some of the advantages of using SAS OnDemand for Academics:

- Students and professors gain immediate online access to SAS software – with no configuration or support concerns.
- Students, including both on-site and distance learners, can use SAS whenever or wherever they please - no more waiting for a seat in a campus computer lab or having to buy and install software.
- SAS allows professors to teach data management and analytics, providing multiple software applications without maintenance or IT overhead.
- SAS has been used in colleges and universities for more than 30 years.
- With quick access to award-winning software for data management and analytics, students gain valuable SAS skills that are highly sought after in the job market.

The following sections list the SAS software that is available with SAS OnDemand for Academics.

Client Software

Instructors can choose to use one of the following software applications when they register a course with SAS OnDemand for Academics:

- SAS Enterprise Guide
- SAS Enterprise Miner
- SAS Forecast Server
- SAS Web Editor

When students register for the course, they must select the same software application that their instructor has chosen to use.

Server Software - SAS Enterprise Guide

The following products are available on the hosted SAS server that supports SAS OnDemand for Academics: Enterprise Guide:

- Base SAS
- SAS/STAT software
- SAS/GRAPH software
- SAS/ETS software
- SAS/OR software, including OPT, PRS, IVS, and LSO
- SAS/IML software
- SAS/CONNECT
- SAS High-Performance Forecasting
- SAS/ACCESS Interface to PC Files

Server Software - SAS Enterprise Miner

The following products are available on the hosted SAS server that supports SAS OnDemand for Academics: Enterprise Miner.

- Base SAS
- SAS/STAT software
- SAS/GRAPH software
- SAS/ETS software
- SAS/OR software, including OPT, PRS, IVS, and LSO
- SAS/IML software
- SAS/CONNECT
- SAS Enterprise Miner
- SAS Credit Scoring
- SAS Text Miner
- SAS High-Performance Forecasting
- SAS/ACCESS Interface to PC Files

Server Software - SAS Forecast Server

The following products are available on the hosted SAS server that supports SAS OnDemand for Academics: Forecast Server:

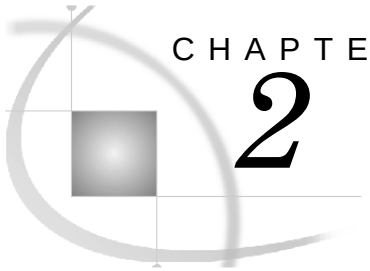
- Base SAS
- SAS/STAT software
- SAS/GRAPH software
- SAS/ETS software
- SAS/OR software, including OPT, PRS, IVS, and LSO
- SAS/IML software
- SAS/CONNECT
- SAS Enterprise Miner
- SAS Credit Scoring

- SAS Text Miner
- SAS High-Performance Forecasting
- SAS/ACCESS Interface to PC Files
- SAS/ACCESS Interface to MYSQL
- SAS Forecast Studio
- SAS/IML Studio

Server Software - SAS Web Editor

The following products are available on the hosted SAS server that supports SAS OnDemand for Academics: Enterprise Guide:

- Base SAS
- SAS/STAT software
- SAS/GRAPH software
- SAS/ETS software
- SAS/OR software, including OPT, PRS, IVS, and LSO
- SAS/IML software
- SAS/CONNECT
- SAS High-Performance Forecasting
- SAS/ACCESS Interface to PC Files
- SAS/QC software



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SAS OnDemand for Academics: Enterprise Guide

This manual guides students through recommended steps for registering for and using SAS OnDemand for Academics.

Step 1. Confirm System Requirements

Check the following guidelines to ensure you can access the software. Your system must meet these requirements for SAS OnDemand for Academics: Enterprise Guide to be fully supported.

	Requirement	Note
Operating systems	Microsoft Windows 7 Home Premium and above (64-bit) (with Service Pack 1) or Microsoft Windows 8 (64-bit).	Macintosh operating systems are not supported. Microsoft Windows Media Center is not supported. Microsoft Windows XP (or any other 32-bit Microsoft Windows operating system) is not supported.
Internet browser	Microsoft Internet Explorer 8 and above.	Other Internet browsers might work but have not been fully tested and are not supported by SAS.
Hard disk space	Approximately 80 MB of free hard disk space.	You are prompted to install Microsoft .NET if it is not on your machine. This requires additional disk space.

Only one version of SAS Enterprise Guide can be installed on a machine at one time. For example, if you have traditional SAS Enterprise Guide installed, then installing SAS OnDemand for Academics: Enterprise Guide on the same machine is not recommended.

Step 2. Set Up Your SAS OnDemand for Academics Account

There are several important steps that you must follow to set up a SAS OnDemand for Academics account, such as creating a SAS profile and registering for your course. The online process uses a series of windows to guide you.

About the SAS OnDemand for Academics Control Center

Your starting point for accessing SAS OnDemand for Academics is the SAS OnDemand for Academics Control Center website. You use it to register, acquire a license, and view course information.

http://support.sas.com/ctx3/sodareg/index.html

Your SAS OnDemand for Academics Home Page is created during the registration process and is part of the SAS OnDemand for Academics Control Center. You are taken to your Student Home Page once you have set up an account. You access your home page to register for or view information associated with courses.

About Your SAS Profile Account

A SAS profile is an account that you can create to access specific information and resources from the SAS website. If you are a current SAS user, then you might already have a SAS profile. If you are a new SAS user, then a SAS profile is created for you when you register for SAS OnDemand for Academics.

An important part of your SAS profile account is a SAS profile password that you are prompted to enter each time you access the SAS OnDemand for Academics Control Center.

Note: Your SAS profile password must be changed every 6 months for security purposes. You will receive an e-mail when your password is approaching expiration. To reset your SAS profile, visit My SAS Profile page at this location: https://www.sas.com/profile/user/login.htm

Important Information Before You Begin

As you begin setting up your account, it is helpful to keep the following in mind:

- You will need access to your e-mail account. When you begin registration, you are prompted to enter an e-mail address. Enter the e-mail address of an account that you can access easily while completing your registration.
- You will receive an e-mail during the initial registration process that you must open and act upon to continue. The e-mail prompts you to click a link to verify your e-mail address. Its primary purpose is to confirm that you are using a valid e-mail address and that someone else is not attempting to register you without your knowledge.
- If you do not receive the e-mail, then check your junk e-mail folder.

Register for a Course

You must register to select and get access to the SAS software being used for the course. During registration, you are required to select a university, an instructor, and a course. Visit the SAS OnDemand for Academics Control Center to begin: http://support.sas.com/ctx3/sodareg/index.html

1. Enter your e-mail address in the text box to get started.
2. Follow the instructions.

Visit the following location to print step-by-step instructions: http://support.sas.com/ondemand/manuals/enterprise_guide_student.pdf

Step 3. Access and Use the Software

Ideally, you should perform this step before you begin your first assignment using SAS OnDemand for Academics software.

Access Your SAS OnDemand for Academics Account

Your SAS OnDemand for Academics account enables you to view and edit information that is associated with courses. You will have access to this information after you have initially registered for SAS OnDemand for Academics.

To access an existing SAS OnDemand for Academics account:

1. Access the SAS OnDemand for Academics Control Center at: http://support.sas.com/ctx3/sodareg/index.html.
2. Enter your e-mail address and your SAS profile password and then click **Enter**.

Install SAS Enterprise Guide

To use SAS Enterprise Guide from SAS OnDemand for Academics account, you must first install a copy of the software on your computer. Follow these steps to install SAS Enterprise Guide software:

1. Log on to your SAS OnDemand for Academics Control Center using your e-mail address and your SAS profile password.
2. Scroll to the bottom of your Home Page to see a table that lists the courses that you have registered.
3. Click **Download Client** for the appropriate course.
4. After the software client is downloaded and installed, you can begin using the software and accessing the SAS server.

For step-by-step guidance including graphics, you can download *SAS OnDemand for Academics: Enterprise Guide Student Registration Instructions* from http://support.sas.com/ondemand/manuals/enterprise_guide_student.pdf or visit the SAS OnDemand for Academics website at http://www.sas.com/academics.

Access the SAS Server

You are prompted to connect to the SAS server each time you start SAS OnDemand for Academics: Enterprise Guide. The server (which is hosted at SAS Institute Inc.) remotely processes any submitted SAS files or projects and returns results to your computer.

If you are unable to use a SAS OnDemand for Academics software application to perform processing, then make sure that you have a working Internet connection.

If your Internet connection is working normally, then you can check the SAS server status web page at https://www.ondemand.sas.com/status/oda/ to determine whether appropriate servers are available or temporarily down for maintenance.

Avoid Connection Time-outs

Avoid leaving open connections on the server. An open connection to the SAS server will likely disconnect (time out) after one hour (or less) if the connection is idle (that is, you have not performed any processing). Many firewalls disconnect open sessions after an hour of idle time (or less). It is best practice to complete your work, save it, and then exit SAS OnDemand for Academics: Enterprise Guide before you leave the computer.

SAS Server Maintenance and Availability

SAS makes its best efforts to make the server available as much as possible and to keep unexpected downtime to a minimum. There could be limited times when the server is unavailable because SAS is performing maintenance, testing, or performance enhancement tasks.

- If server maintenance is needed, then SAS will try to perform this work during nontraditional usage hours to lessen any impact to users.
- SAS uses the third Saturday of each month to perform scheduled maintenance on its systems (if needed). Therefore, the server might be unavailable for a portion of time on the third Saturday of each month.

To determine whether SAS servers are available, visit the SAS server status web page at: https://www.ondemand.sas.com/status/oda/.

Requesting SAS Server Availability Notification

If you would like to be notified when the SAS server is unavailable due to extended maintenance or due to unforeseen circumstances, then subscribe to the `SASONDEMANDSERVER-L` mailing list:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `subscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed). Follow any instructions that you receive via e-mail.

To unsubscribe from SASONDEMANDSERVER-L:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `unsubscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed).

Step 4. Review the Basics for Working with Data and Results

Before attempting course exercises, we recommend that you review the basics of working with SAS data sets and results in SAS OnDemand for Academics: Enterprise Guide.

Working with Data

To ensure that you do not lose your work, you should cover the basics of uploading and downloading files from the SAS server.

Storing Data

There are two ways to store data for use with SAS OnDemand for Academics:

- Instructors can choose to store data for course exercises on the SAS server. You can access the data using a LIBNAME or FILENAME statement that your instructor provides you.
- Instructors or students can store the data that they want to use on a data source that can connect to their PC. Sources could include a local file system, university space (such as AFS or NFS space), or portable disk drives.

Uploading Data Files to the SAS Server

If the data that you want to use is not already available from the SAS server, then you can use the **Upload Data Files to Server** task available within SAS OnDemand for Academics: Enterprise Guide.

The **Upload Data Files to Server** task enables you to select one or more SAS data sets (*.sas7bdat) from your local Microsoft Windows file system and copy them to the SAS server (the SAS Cloud) for processing. You must perform this step in order to work with any local SAS data sets because the SAS server cannot access any data on your local drives.

The task generates a log that summarizes the data files that were copied, the byte size, timings for each file and for all of the files as a group, and any errors that occurred during the transfer. By default, all data files are added as output data in your SAS Enterprise Guide project so that they can be used in the project.

Note: Because any modifications that you make to the data will not be saved once you end your session, you might want to download any data files that you have changed from the SAS server to your local PC after you have finished your work.

To upload a data set:

1. Select the SAS data sets to upload.
2. Specify the upload options.

To select the SAS data sets to upload:

1. Select **Tasks ▸ Data ▸ Upload Data Files to Server**. The Upload Data Files to Server window is displayed.
2. Select **Add** to select the SAS data sets that you want to copy. The Open dialog box is displayed.
3. Select the name of the file that you want to copy. To select more than one file, hold down the Ctrl key while selecting the files that you want to add. Files must be SAS7BDAT files.
4. Select **Open** to add the files to the list of data sets that you want to copy. Note that all files that are copied are given lowercase names on the target server.
5. Select **Next** to specify the upload options. The Upload Data Files to Server window is displayed. This window specifies the name of the SAS server and the destination SAS library for your project. To specify the upload options:
   - If you want to overwrite any existing files on the SAS server that have the same name as the files that you are copying, select the **Overwrite existing files with the same name** check box. By default, existing files are not overwritten.
   - If you do not want to add the data sets that you are copying to your current SAS Enterprise Guide project, then clear the **Add data files to your current project** check box. By default, the copied data sets are added to the current project.

   Note: The SAS server for SAS OnDemand for Academics is selected by default, and cannot be changed.

   Note: The WORK library is the destination SAS library by default and should not be changed. The WORK library is specified because it is the only location on the SAS server that you have the ability to temporarily store data for processing. Selecting any library other than WORK results in an error.
6. Select **Finish** to copy the data sets to the SAS server. A log is created and appears in the SAS Enterprise Guide Project Explorer.

Downloading Data Files from the SAS Server

The **Download Data Files to PC** task enables you to select one or more SAS data sets (*.sas7bdat) from the SAS server and copy them to your local Microsoft Windows file system. It is important to complete this step if you have modified any SAS data sets that you want to use again in the future.

The task generates a log that summarizes the data files that were copied, the byte size, timings for each file and for all of the files as a group, and any errors that occurred during the transfer.

To download a data set:

1. Select the SAS data sets to download.
2. Specify the download options.

To select the SAS data sets to download:

1. Select **Tasks ▸ Data ▸ Download Data Files to PC**. The Download Data Files to PC window is displayed.
2. Select **Add** to select the SAS data sets that you want to copy. The Open dialog box is displayed.
3. Select the name of the file that you want to copy. To select more than one file, hold down the Ctrl key while selecting the files that you want to add. Files must be SAS7BDAT files. All files that are copied are given lowercase names in the target folder.
4. Select **Open** to add the files to the list of data sets that you want to copy.
5. Select **Next**. The Download Data Files to PC window is displayed. To specify the download options, follow these steps:
   - Enter the path of the folder to which you want to copy the files or select **Browse** to select a folder. The default location is your My Documents folder.
   - If you want to overwrite any existing files in your PC folder that have the same name as the files that you are copying, select the **Overwrite existing files with the same name check** box. By default, existing files are not overwritten.
6. Select **Finish** to copy the data sets. A log is created and is displayed in the SAS Enterprise Guide Project Explorer.

Accessing Data Using SAS OnDemand for Academics: Enterprise Guide

The SAS server includes sample SAS data sets that you might choose to use. In addition, if course files and SAS data sets have been uploaded to the SAS server, then you can access these SAS data sets as well. To access the SAS data sets:

1. Start SAS OnDemand for Academics: Enterprise Guide and log on.
2. Select **File ▸ Open ▸ Data**.
3. Select **Servers**.
4. Double click **SAS Apps**.
5. Double click **Libraries**.
6. Double click the appropriate library (such as MAPS, SASHELP, or the library that you have assigned using a LIBNAME statement).
7. Double click the SAS data set that you want to use.

Note: If you modify a SAS data set that exists on the SAS server and you want to save that SAS data set, then you must download the data set to a local drive. If you do not, then your modifications are lost when you end your session.

In addition, some of the SAS data sets that are available from the SAS server might be too large to download locally unless you have modified them to make them smaller. In

this case, it is recommended that you work with the original SAS data sets only while connected to the SAS server.

Accessing Grayed-out SAS Libraries from the SAS Server

The SAS server includes sample SAS data sets that you might choose to use. Some of the sample SAS libraries might appear to be grayed out, but they are still available for use.

Typically, grayed-out SAS libraries appear for users in Europe and were originally intended for use with another SAS software application, such as SAS Enterprise Miner.

1. Start SAS OnDemand for Academics: Enterprise Guide and log on.
2. Select **File ▸ Open ▸ Data**.
3. Select **Servers**.
4. Double click **SAS Apps**.
5. Double click **Libraries**.
6. Right-click on the grayed-out SAS library that you would like to access and then click **Assign**.
7. Double click the SAS data set that you want to use.

Uploading Data Files to the SAS Server versus Opening SAS Data Sets

If you have access to a local SAS data set, then you can choose **File ▸ Open ▸ Data** and select the appropriate SAS data set. However, this is not the preferred method. Instead, it is best practice to upload the SAS data set to the SAS server. This improves data transfer speed and ensures that the step is recorded as part of your project.

Working with Data Files Other Than SAS Data Sets

If you want to work with data other than SAS data sets (such as comma delimited files or text files), then you can import the files in to SAS OnDemand for Academics: Enterprise Guide. To import files that are not SAS data sets:

1. Select **File ▸ Import Data**.
2. Select **Local Computer**.
3. Find and select the data file that you want to use.

Working with Compressed SAS Data Sets

SAS does not recommend that you work with compressed SAS data sets when using SAS OnDemand for Academics: Enterprise Guide. If you have a compressed SAS data set, then you can use the COMPRESS=NO option to remove compression.

Assigning LIBNAME and FILENAME Statements

The SAS server is unable to recognize or access the local drives of your PC. Therefore, if your SAS program includes a LIBNAME or FILENAME statement that refers to a local path (such as a location on your C: drive), then you receive processing errors.

Instructors have the ability to store SAS data sets and other data files on the SAS server. If your instructor has taken advantage of this feature, then you receive either a

LIBNAME statement or a FILENAME statement from your instructor that you can use to access the appropriate data.

Note: LIBNAME or FILENAME statements are case sensitive. Copy them or enter them in exactly as they are shown to avoid permissions errors.

If you do have local SAS data sets that you want to use, then it is recommended that you upload them. You can then refer to the uploaded SAS data sets in your code or in your projects. In addition, if you modify the SAS data sets that you upload and you want to use them again, then you should download the SAS data sets from the SAS server prior to exiting SAS OnDemand for Academics.

Accessing Data with LIBNAME or FILENAME Statements

Once a SAS data set or a data file has been uploaded to the SAS server, users can access the data using the appropriate LIBNAME or a FILENAME statement. The LIBNAME or FILENAME statement to use is provided to you during the course registration process. To access this information at any time:

1. Log on to your SAS OnDemand for Academics Home Page.
2. Start SAS OnDemand for Academics: Enterprise Guide.
3. Create or open a SAS program.
4. Assign the LIBNAME or FILENAME statement in your code in order to access your data. Remember LIBNAME and FILENAME statements are case sensitive.

Working with INFILE Statements

An INFILE statement identifies an external data file to read with an INPUT statement. If you plan to use an INFILE statement or are asked to use an INFILE statement to access data, then you must use a fully qualified path in your statement.

For example, if `country.dat` exists in a course directory called `/courses/u_0/i_123/c_105`, then the INFILE statement to access this data file would be:

```
infile '/courses/u_0/i_123/c_105/country.dat';
```

However, if you specified a path that is not fully qualified (such as the following), then an error would be produced:

```
infile 'country.dat';
```

Students must use the INFILE statement (with the fully qualified path) that your instructor provides.

Working with INFILE Statements and Microsoft Windows Data Files

If you import or upload a raw data file (such as a text file or a comma-separated-value file) from a PC using the Microsoft Windows operating system, then the file might contain carriage-return characters. These carriage-return characters cause errors when you attempt to read the file on the UNIX version of SAS used by SAS OnDemand for Academics servers.

For example, using the following INFILE statement could cause data processing or data display errors:

```
infile newemps dlm=',';
```

These errors can be avoided by using the following INFILE statement:

```
infile newemps dlm=',' TERMSTR=CRLF;
```

For more information about the TERMSTR option, search for TERMSTR in SAS 9.3 Online Documentation at http://support.sas.com/documentation.

Saving Work

SAS OnDemand for Academics: Enterprise Guide is unable to store your work on the SAS server (the SAS Cloud). Instead, you must save any work (SAS Enterprise Guide projects, SAS files, output files, and so on) to a hard disk drive that you can access before ending your session.

To save any work within SAS OnDemand for Academics: Enterprise Guide, start by selecting one of the following options:

- To save a file, choose **File ▸ Save** or **File ▸ Save As**.
- To save a project, choose **File ▸ Save Project** or **File ▸ Save Project As**.

Working with Results

With SAS OnDemand for Academics: Enterprise Guide, you have the ability to select the type of result format that you want to produce. By default, the result format is set to HTML.

Working with the PDF Result Format

If you choose to use the PDF result format, then certain graphics appear distorted unless you also change the default graph format to GIF or JPEG.

To use the PDF result format and ensure that graphs render appropriately:

1. Open SAS OnDemand for Academics: Enterprise Guide.
2. Select **Tools ▸ Options**.
3. From the left side of the screen, select **Results General** from the tree.
4. Select **PDF**.
5. From the left side of the screen, select **Graph** from the tree.
6. From the **Graph Format** menu, select **GIF** or **JPEG**.

Result Formats and Associated Graph Formats

The default graph format is ActiveX, which typically provides the best results for HTML and SAS Report result formats. If you need to use a result format such as PDF, which does not support interactive graphics types, then you will also need to change the graph format to a static device type such as GIF or JPEG. The following table references result formats and the graph formats that each supports:

Result Format	Supported Graph Formats
HTML	ActiveX, Java, GIF, JPEG, SAS EMF
SAS Report	ActiveX, GIF, JPEG
PDF	GIF, JPEG, SAS EMF
RTF	ActiveX, GIF, JPEG, SAS EMF
Text (Listing)	None

Step 5. Finding Help for Common Problems

Check the "Commonly Asked Questions: SAS OnDemand for Academics: Enterprise Guide" on page 15 and follow the procedures below for additional help.

Where Can Students Find Help?

Students should be asked to follow the steps below to resolve any support issues that they encounter:

Step 1. Review Commonly Asked Questions, SAS Notes, and SAS Documentation

Use the key word "ondemand academics" to search for issues specific to SAS OnDemand for Academics from these sources:

- "Commonly Asked Questions: SAS OnDemand for Academics: Enterprise Guide" on page 15
- SAS Notes, a database of common technical issues found at http://support.sas.com/notes
- SAS Product Documentation at http://support.sas.com/documentation

Step 2. Contact Your Instructor

If you are a student and you have questions about using SAS OnDemand for Academics, then contact your instructor. Instructors can point students toward educational resources and help ensure that offerings are used correctly.

If further assistance is needed, then your instructor can contact SAS Technical Support.

Commonly Asked Questions: SAS OnDemand for Academics: Enterprise Guide

- Does SAS OnDemand for Academics: Enterprise Guide have all the same features as SAS Enterprise Guide?

  Certain features of SAS OnDemand for Academics: Enterprise Guide have been disabled because they are not practical in this setting. For example, the ability to schedule projects is not available. Note that the online Help system documents all SAS Enterprise Guide features, including those that might be unavailable in this offering.

- Can I download SAS OnDemand for Academics clients on to more than one machine?

  Yes. For example, you might download a client on to a personal computer at home as well as a laptop if you use both machines to complete assignments.

- I am using the keyboard to install SAS OnDemand for Academics: Enterprise Guide. How do I change focus on the initial installation window?
  - When the initial installation window is displayed, the focus is on Step 1: Verify System Requirements. To select this option, press **Enter**.
  - After Step 1 has completed, you must press **Tab** to move focus to Step 2 (Install SAS Enterprise Guide).

- After you have moved the focus to Step 2, press **Enter** to begin the SAS Enterprise Guide installation process.

- I have installed SAS OnDemand for Academics: Enterprise Guide, but I am not prompted to log on to it when I start the application. What should I do?

  Make sure that you ran the System Requirements Wizard during installation. When you start the process of installing SAS OnDemand for Academics: Enterprise Guide, an initial installation window provides you with two choices:

  1 Verify system requirements.

  2 Install SAS Enterprise Guide.

  If you did not perform Step 1 (verify system requirements), then Microsoft .NET 1.1 is not installed and will likely cause the error that you are experiencing.

  To correct the situation, start the setup.exe file that you downloaded from the SAS Download Manager. When the installation window is displayed, choose Step 1. After the System Requirements Wizard runs and installs Microsoft .NET 1.1 on your machine, you should be able to use SAS OnDemand for Academics: Enterprise Guide.

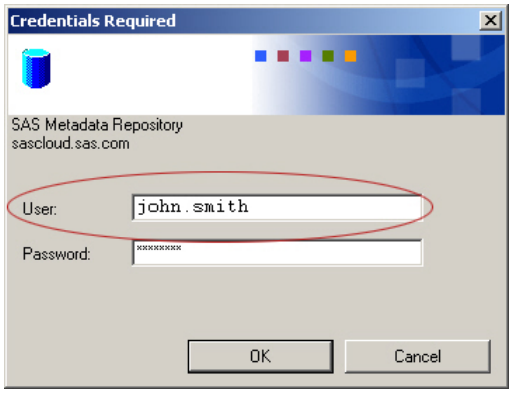
  Note: If Microsoft .NET 1.1 stops responding during the installation process, then follow the instructions in SAS Note 16884 at http://support.sas.com/notes/.

  For more information and possible answers to your issue, review the following SAS Usage Notes:

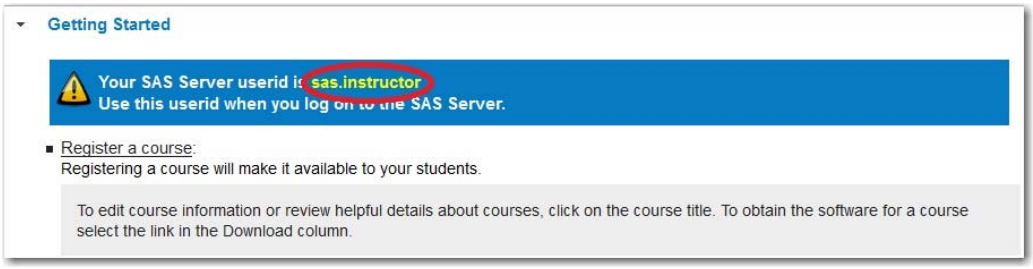
  - SAS Note 34715
  - SAS Note 20939
  - SAS Note 20437

- How do I log on to SAS OnDemand for Academics: Enterprise Guide?

  When you open SAS OnDemand for Academics: Enterprise Guide, the Credentials Required window is displayed:



  You must use this window to log on to the SAS server (the SAS Metadata Repository) so that you can perform SAS processing.


Getting Started
Your SAS Server userid is sas.instructor
Use this userid when you log on to the SAS Server.
Register a course:
Registering a course will make it available to your students.
To edit course information or review helpful details about courses, click on the course title. To obtain the software for a course select the link in the Download column.

To log on, enter the following information:

1. In the **User** field, enter your SAS server user ID. This user ID is also displayed on your SAS OnDemand for Academics Home Page.
2. In the **Password** field, enter your SAS profile password. There are two times when you might have supplied a SAS profile password: when you originally created a SAS profile or when you registered for SAS OnDemand for Academics.

- How do I find out more information about using SAS OnDemand for Academics: Enterprise Guide?

  After you have downloaded and installed the client software application that you plan to use, you can refer to the options on its **Help** menu. You can also refer to the "Learning Resources for SAS OnDemand for Academics" appendix in this manual.

- Can I access the Program Editor, Log, and Output windows using SAS OnDemand for Academics: Enterprise Guide?

  Yes. You can access and use traditional SAS Programming windows. For example, select **File ▸ New ▸ Program** or **File ▸ Open ▸ Program** to access the Program Editor. After you run a SAS program, the Log and Output windows will be displayed (if appropriate).

- Will SAS OnDemand for Academics: Enterprise Guide work if I already have SAS Enterprise Guide installed on my computer?

  Yes. Both versions can be installed on the same computer and work independently.

- How do I work with data in SAS OnDemand for Academics: Enterprise Guide?

  SAS OnDemand for Academics: Enterprise Guide works in conjunction with the SAS server. The easiest way to work with data is to ensure that the SAS server has access to that data. You can do this by using existing sample data sets on the SAS server, uploading data files to the SAS server, or accessing data that an instructor has chosen to store on the SAS server.

- How do I share data with other users who are using SAS OnDemand for Academics: Enterprise Guide?

  If you have data that you want to share with other users, then you must place it in a location that others can access, such as a shared network drive. Users can then access the data in one of two ways:

  - Users can select **File ▸ Open**, and then choose **Project**, **Data**, or **Program**. A user can then select the **Local Computer** source and navigate to the drive and directory path that contains the data that you want them to use.
  - Users can select **Tasks ▸ Data ▸ Upload Data Files to Server**. The user is given the option of navigating to the appropriate drive and directory to find

the SAS data set that you want them to use. This data is then uploaded to the SAS server and made available for processing.

Note: This is the preferred method for sharing SAS data sets because it is faster than opening a SAS data set.

Only instructors have the ability to store data on the SAS server. Once the data is stored, instructors can share a LIBNAME or FILENAME statement with users so that they can access the data.

- How do I upload local data files from my PC to the SAS server?

  You can use SAS OnDemand for Academics: Enterprise Guide to upload local SAS data sets to the SAS server for processing. From SAS Enterprise Guide, select **Tasks ▸ Data ▸ Upload Data Files to Server**. Then follow the steps in the wizard that is displayed. Refer to "Uploading Data Files to the SAS Server" on page 9.

- How do I download data files from the SAS server to my PC?

  You can use SAS OnDemand for Academics: Enterprise Guide to download SAS data sets from the SAS server to your PC. From SAS Enterprise Guide, select **Tasks ▸ Data ▸ Download Data Files to PC**. Then follow the steps in the wizard that is displayed. Refer to "Downloading Data Files from the SAS Server" on page 10.

- Can I use data other than SAS data sets?

  Yes. If you want to work with data other than SAS data sets (such as comma delimited files or text files), then you can import the files into SAS OnDemand for Academics: Enterprise Guide. To import other data, follow these steps:

  1. Select **File ▸ Import Data**.
  2. Select **Local Computer**.
  3. Find and select the data file that you want to use.

  In addition, if your instructor has stored data files other than SAS data sets on the SAS server, then he or she will provide you with a FILENAME statement that you can use to access the data.

- I am trying to use an INFILE statement to access data, but it is causing errors. How should I use an INFILE statement?

  You must use a fully qualified path when using an INFILE statement within SAS OnDemand for Academics: Enterprise Guide. In addition, INFILE statements are case sensitive. Ensure that you are entering the INFILE statement appropriately. Refer to "Working with INFILE Statements" on page 13.

- I uploaded a file and am referring to the file using an INFILE statement, but not all of the fields are being read correctly. What is happening?

  This could be the result of uploading a text file or a comma-separated-value file from a PC that uses the Microsoft Windows operating system. Adding the TERMSTR option to your INFILE statement might correct the issue.

- I have copied code in to the code (Program) window, but I am getting errors when I try to run the code. What is happening?

  This could be the result of hidden or special characters in the code that you copied in to the Code window. One way to resolve this issue is to enter the code instead of copying the code. If the amount of code is too much to enter, then you could try saving the code as a text file to remove any special characters or formatting and

then copying the code in to the Code window. For more information and options, search for SAS Note 16658 on http://support.sas.com/notes.

- How do I save my projects or files from within SAS OnDemand for Academics: Enterprise Guide?

  You must save all your work to your local computer because any work that you have completed (and any data that you have uploaded to the SAS server, if applicable) is lost when you end your SAS OnDemand for Academics session.

  When you choose to save your work or if you are prompted to save your work, select **Local Computer** instead of **SAS Servers**, and then proceed to save your work to the appropriate local directory.

- I received an error message when trying to save work using SAS OnDemand for Academics: Enterprise Guide. What is wrong?

  You might receive an error message such as this:

  "An error occurred saving the file. Location must be configured as a WebDAV URI."

  In this case, it is likely that you were trying to save your work to the SAS servers instead of to your local computer. To avoid this error when you save your work, select **Local Computer** instead of **SAS Servers**. You can then select the local directory to which you want to save your work.

- I am using Output Delivery System (ODS) statements in SAS OnDemand for Academics: Enterprise Guide in order to write results files (PDF, RTF). How do I save these files locally?

  With SAS OnDemand for Academics: Enterprise Guide, you are unable to write ODS statements that direct files to your local directories. All SAS statements will run on the SAS server only. However, you can enable different output results formats:

  1. Select **Tools ▸ Options**.
  2. From the tree on the left side of the window, select **Results**.
  3. Select the results format or formats that you want to produce, such as **PDF** or **RTF**.

  Your SAS code now produces the output results that you selected and download them from the SAS server. To save these results permanently, right-click on each results file and then select **Export**.

  Note: Due to graph device restrictions on the SAS server, if your PDF output contains any charts, then you must specify GIF or JPG as the graph device format.

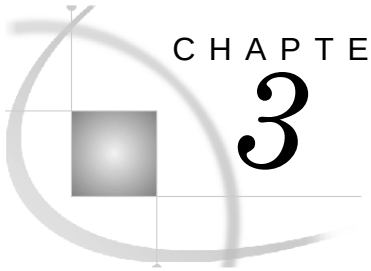
- Can I convert the HTML or SAS Report output that I produce with SAS OnDemand for Academics: Enterprise Guide into PDF files?

  There is no way to accomplish this from within SAS OnDemand for Academics: Enterprise Guide. However, you could export the output files and then use a freeware PDF printer driver to accomplish this goal. To export your output, right-click on the appropriate file and then select **Export**.

- How do I view or print multiple output files at the same time using SAS OnDemand for Academics: Enterprise Guide?

  There are two ways to combine results to make one viewable and printable document:

- Select **Tools ▸ Create HTML Document**. This option lets you take the HTML output files that you have created in your project and combine them into a single HTML document, which you can save and print.
- Select **File ▸ New ▸ Report**. This option works only when you use SAS Report instead of HTML as your output format. SAS Report output looks like HTML on the screen, but prints like a PDF (page-oriented). The report builder interface enables you to combine output from various tasks, arrange the output the way you like, add headers and footers and images, and control aspects of page layout and margins.



CHAPTER 3

SAS OnDemand for Academics: Enterprise Miner

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SAS OnDemand for Academics: Enterprise Miner

This chapter guides students through recommended steps for registering for and using SAS OnDemand for Academics.

Step 1. Confirm System Requirements

Check these guidelines to ensure you can access the software.

Confirm Requirements for Full Support

Your system must meet these requirements for SAS OnDemand for Academics: Enterprise Miner to be fully supported.

	Supported	**Not Supported**
Operating systems	Any system that supports the Sun Microsystems (Oracle) Java Runtime Environment (JRE). Typically, this includes UNIX, Linux, and various Microsoft Windows operating systems, such as Microsoft Windows XP and Microsoft Windows Vista.	Macintosh operating systems are not supported. ***Note:*** Virtualized environments might not work. It is recommended that supported operating systems run on a physical CPU.
Java Runtime Environment	Java Runtime Environment (JRE) Version 1.6.0_24. ***Note:*** You are prompted to check for this JRE and install it when you access SAS Enterprise Miner.	JRE 1.6.0_20 is not compatible. ***Note:*** Other JREs from the 1.6 series might work.
Hard disk space	At least 50 MB of free hard disk space.	
Internet browser	Any browser that supports JRE 1.6.0_24.	
Internet connection	High speed, including broadband (cable), DSL (phone), and wireless connections. ***Note:*** Individual usage experience depends on speed and reliability of connection.	
Network bandwidth	For best performance, at least 1000 Kbit/sec is recommended.	
Memory	At least 3 GB; 4 GB is recommended.	

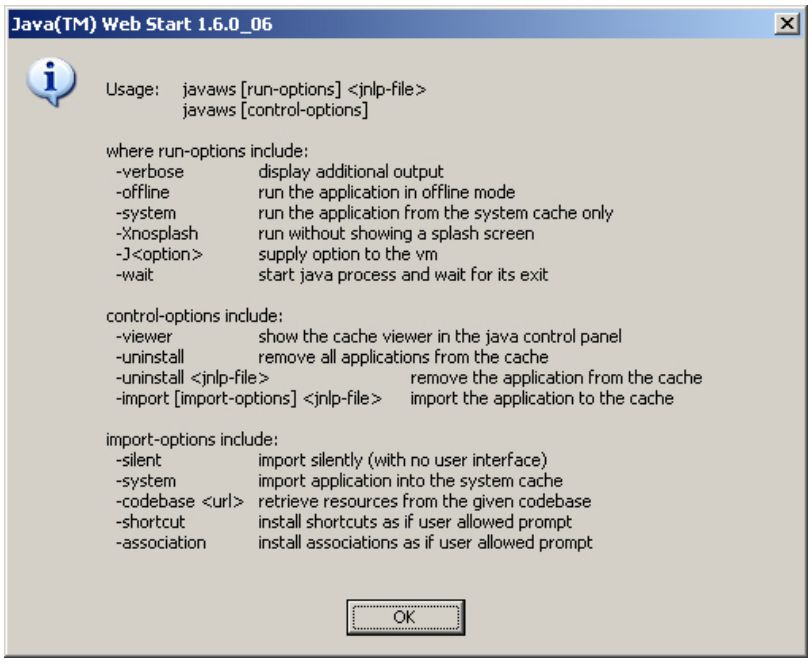
Verify and Install a Java Runtime Environment

After you have registered for a course that uses SAS OnDemand for Academics: Enterprise Miner, you must verify that you have an appropriate Java Runtime Environment (JRE) installed or install an appropriate JRE. This process needs to be completed only once.

Step 1. Verify Whether a JRE (and Java Web Start) Is Installed

To verify whether you installed a JRE, complete these steps:

1. Open a Command Prompt window. Select **Start ▸ Run**.
2. Type CMD in the Run window.
3. On the Command Prompt window, type start javaws.
4. If the above command opens a Java Web Start window similar to the following, then you have a JRE (and Java Web Start) installed.


Java(TM) Web Start 1.6.0_06
Usage: javaws [run-options] <jnlp-file>
javaws [control-options]
where run-options include:
-verbose display additional output
-offline run the application in offline mode
-system run the application from the system cache only
-Xnosplash run without showing a splash screen
-J<option> supply option to the vm
-wait start java process and wait for its exit
control-options include:
-viewer show the cache viewer in the java control panel
-uninstall remove all applications from the cache
-uninstall <jnlp-file> remove the application from the cache
-import [import-options] <jnlp-file> import the application to the cache
import-options include:
-silent import silently (with no user interface)
-system import application into the system cache
-codebase <url> retrieve resources from the given codebase
-shortcut install shortcuts as if user allowed prompt
-association install associations as if user allowed prompt
OK

If you installed a JRE, then continue to Step 2.

If the above command did not work, then you likely have not installed a JRE. Continue to Step 3.

Step 2. Ensure That You Are Using Only the Recommended Java Runtime Environment

We recommend that you use JRE 1.6.0_24 to run SAS OnDemand for Academics: Enterprise Miner. Only JREs with U.S. Export Control Classification Numbers of 5D992 are approved for use with SAS products.

Note: Other JREs from the 1.6 series might also work (excluding JRE 1.6.0_20, which is incompatible).

1. From a Command Prompt window, start Java Web Start. Type start javaws -viewer and then press **Enter**.
2. If the Java Cache Viewer window is displayed, close it so that you can see the Java Control Panel window. The Java Control Panel window often opens behind the Java Cache Viewer window.
3. From the Java Control Panel window, select the **Java** tab.
4. From the **Java Application Runtime Settings** area (the bottom half of the window), click **View** (the second **View** button on the window).
5. In the **Enabled** column, check only one JRE (uncheck any other JREs that are checked). We recommend that you check JRE 1.6.0_24.

If JRE 1.6.0_24 is unavailable, then you can test SAS OnDemand for Academics: Enterprise Miner with your current JRE. To do so, you can start from your SAS OnDemand for Academics Home Page.

If your current JRE does not work or if you want to install the recommended JRE, then continue to Step 3. Otherwise, configuration is complete.

Step 3. Install the Recommended Java Runtime Environment and Java Web Start

Installing the recommended JRE also installs Java Web Start on your system.

Note: If you completed Step 2 above, repeat this step to ensure that only JRE 1.6.0_24 is selected.

1. Access the appropriate list of Java SE Downloads at: http://www.oracle.com/technetwork/java/javasebusiness/downloads/java-archive-downloads-javase6-419409.html#jre-6u24-oth-JPR
2. Click the radio button above the table to Accept License Agreement.
3. Select **jre-6u24-windows-i586.exe** under **Download** column.
4. You are prompted to sign in to your Oracle web account. If you do not have an account, then you are prompted to create one.
5. After you are signed in, launch the download and select **Run** to begin the installation process.
6. (Optional) If you completed Step 2 above, then repeat this step to ensure that only JRE 1.6.0_24 is selected.

Step 2. Set Up Your SAS OnDemand for Academics Account

There are several important steps that you must follow to set up a SAS OnDemand for Academics account, such as creating a SAS profile and registering for your course. The online process uses a series of windows to guide you.

About the SAS OnDemand for Academics Control Center

Your starting point for accessing SAS OnDemand for Academics is the SAS OnDemand for Academics Control Center website. You use it to register, acquire a license, and view course information.

http://support.sas.com/ctx3/sodareg/index.html

Your SAS OnDemand for Academics Home Page is created during the registration process and is part of the SAS OnDemand for Academics Control Center. You are taken to your Student Home Page once you have set up an account. You access your home page to view information associated with courses.

About Your SAS Profile Account

A SAS profile is an account that you can create to access specific information and resources from the SAS website. If you are a current SAS user, then you might already have a SAS profile account. If you are a new SAS user, then a SAS profile is created for you when you register for SAS OnDemand for Academics.

An important part of your SAS profile account is a SAS profile password that you are prompted to enter each time you access the SAS OnDemand for Academics Control Center.

Note: Your SAS profile password must be changed every 6 months for security purposes. You will receive an e-mail when your password is approaching expiration. To

reset your SAS profile, visit My SAS Profile page at:
https://www.sas.com/profile/user/login.htm.

Important Information Before You Begin

As you begin setting up your account, it is helpful to keep the following in mind:

- You will need access to your e-mail account. When you begin registration, you are prompted to enter an e-mail address. Enter the e-mail address of an account that you can access easily while completing your registration.
- You will receive an e-mail during the initial registration process that you must open and act upon to continue. The e-mail prompts you to click a link to verify your e-mail address. Its primary purpose is to confirm that you are using a valid e-mail address and that someone else is not attempting to register you without your knowledge.
- If you do not receive the e-mail, then check your junk e-mail folder.

Register for a Course

You must register to select and get access to the SAS software that is being used for the course. During registration, you must select a university, an instructor, and a course.

1. Visit the SAS OnDemand for Academics Control Center to begin:
   http://support.sas.com/ctx3/sodareg/index.html
2. Enter your e-mail address in the text box to get started.
3. Follow the instructions.

Visit the following location to print or view step-by-step instructions:
http://support.sas.com/ondemand/manuals/enterprise_miner_student.pdf

Step 3. Access and Use the Software

Ideally, you should perform this step before you begin your first assignment using the SAS OnDemand for Academics software.

Access Your SAS OnDemand for Academics Account

Your SAS OnDemand for Academics account enables you to view information that is associated with courses. You will have access to this information after you have initially registered for SAS OnDemand for Academics.

To access an existing SAS OnDemand for Academics account:

1. Access the SAS OnDemand for Academics Control Center at:
   http://support.sas.com/ctx3/sodareg/index.html
2. Enter your e-mail address and your SAS profile password and then click **Enter**.

Access SAS Enterprise Miner

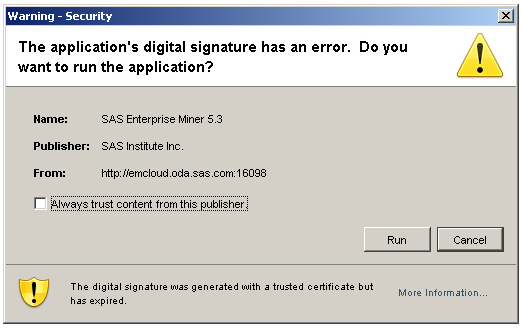
After you have configured your system to support SAS OnDemand for Academics: Enterprise Miner, you can start the application by following these steps:

1. Log on to your SAS OnDemand for Academics Home page.

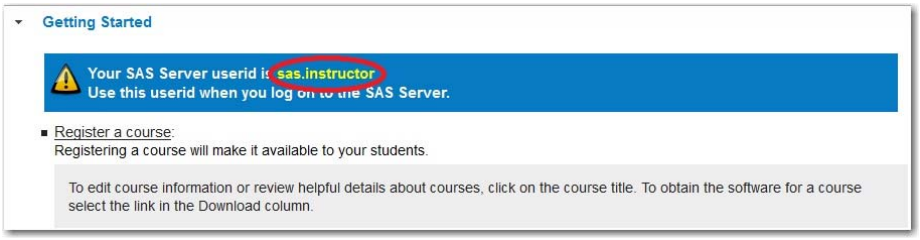
2 From the **Manage Courses** area, select **Get Software** next to the appropriate course. Selecting this link opens a window that includes information about how to configure your system as well as how to start the application.

3 Click the link that is used to start SAS OnDemand for Academics: Enterprise Miner: https://academic93.oda.sas.com/SASEnterpriseMinerJWS/main.jnlp.

4 If you are presented with a security warning such as the following, then select **Run**.


Warning - Security
The application's digital signature has an error. Do you want to run the application?
Name: SAS Enterprise Miner 5.3
Publisher: SAS Institute Inc.
From: http://emcloud.oda.sas.com:16098
Always trust content from this publisher.
Run
Cancel
The digital signature was generated with a trusted certificate but has expired.
More Information...

5 In the **User Name** field, enter your SAS server user ID. This user ID is also displayed on your SAS OnDemand for Academics home page:


Getting Started
Your SAS Server userid is sas.instructor
Use this userid when you log on to the SAS Server.
Register a course:
Registering a course will make it available to your students.
To edit course information or review helpful details about courses, click on the course title. To obtain the software for a course select the link in the Download column.

Note: Your SAS server user ID is case sensitive and should be entered in all lowercase. If you enter your SAS server user ID using uppercase or mixed case letters, then you might be able to log on, but certain tasks might not perform properly.

6 In the **Password** field, enter your SAS profile password. There are two times when you might have supplied a SAS profile password: when you originally created a SAS profile or when you registered for SAS OnDemand for Academics.

7 Click **Log On**.

To start SAS OnDemand for Academics: Enterprise Miner in the future, you can perform the previous steps or save the following URL as a bookmark and use it: https://academic93.oda.sas.com/SASEnterpriseMinerJWS/main.jnlp.

Access the SAS Server

You are prompted to connect to the SAS server each time you start SAS OnDemand for Academics: Enterprise Miner. The server (which is hosted at SAS Institute Inc.) remotely processes any submitted SAS files or projects and returns results to your computer.

Make sure that you have a working Internet connection if you are unable to use a SAS OnDemand for Academics software application to perform processing. If your Internet connection is working normally and you are still unable to perform processing, then it is likely that the SAS server is temporarily unavailable. Try to use the server again later.

You can also log on to the SAS OnDemand for Academics Control Center. The SAS OnDemand for Academics Control Center typically provides a message if the SAS server is unavailable or expected to be unavailable in the near future.

SAS Server Maintenance and Availability

SAS makes its best efforts to make the server available as much as possible and to keep unexpected downtime to a minimum. There could be limited times when the server is unavailable because SAS is performing maintenance, testing, or performance enhancement tasks.

- If server maintenance is needed, then SAS will try to perform this work during nontraditional usage hours to lessen any impact to users.
- SAS uses the third Saturday of each month to perform scheduled maintenance on its systems (if needed). Therefore, the server might be unavailable for a portion of time on the third Saturday of each month.

To determine whether SAS servers are available, visit the SAS server status web page at: https://www.ondemand.sas.com/status/oda/.

Requesting SAS Server Availability Notification

If you would like to be notified when the SAS server is unavailable due to extended maintenance or due to unforeseen circumstances, then subscribe to the `SASONDEMANDSERVER-L` mailing list:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `subscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed). Follow any instructions that you receive via e-mail.

To unsubscribe from SASONDEMANDSERVER-L:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `unsubscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed).

Step 4. Review the Basics for Working with Data, Results, and Projects

Before attempting course exercises, we recommend that you review the basics of working with SAS data sets, models, and results in SAS OnDemand for Academics: Enterprise Miner.

Working with Data

To ensure that you do not lose your work, you should cover the basics of accessing and using data from the SAS server. SAS OnDemand for Academics: Enterprise Miner uses the SEMMA project model to organize work and options for accessing data are specific to this product.

Before you access the appropriate data sets for your exercises, you must assign a SAS library to your projects using one of the following methods: using a project using Start Code or submitting a LIBNAME statement.

Assigning a SAS Library to a Project Using Start Code

SAS OnDemand for Academics: Enterprise Miner enables you to include Start Code for your projects. After you have specified this code, it will be run anytime that the project is started and can save you time and effort. For example, you might want to assign a LIBNAME statement through Start Code so that a project can always access specific SAS data sets.

Using Start Code with a New Project

1. Start SAS OnDemand for Academics: Enterprise Miner.
2. Select **New Project**. From the New Project wizard, select a name for your project, select the default values on the remaining wizard screens, and then select **Finish**.
3. From the Property tree on the left, locate the **Project Start Code** property.
4. Click the ellipsis **...** button.
5. Enter the appropriate Start Code and then click either **Run Now** or **OK**.

Note: If you want to use project Start Code to access SAS data sets that use a format file, then you must also specify the FMTSEARCH option in your Start Code.

Using Start Code with an Existing Project

1. Start SAS OnDemand for Academics: Enterprise Miner.
2. Open the appropriate project.
3. From the Property tree on the left, locate the **Property Code** property.
4. Click the ellipsis **...** button.
5. Enter the appropriate Start Code and then click either **Run Now** or **OK**.

Note: If you want to use project Start Code to access SAS data sets that use a format file, then you must also specify the FMTSEARCH option in your start-up code.

Assigning a SAS Library Using LIBNAME Statements

You can access the Program Editor by selecting **View ▸ Program Editor** from within SAS OnDemand for Academics: Enterprise Miner.

Instructors have the ability to store SAS data sets on the SAS server. If your instructor has taken advantage of this feature, then you must use the appropriate LIBNAME statement for your course to access that data.

Note: LIBNAME statements are case sensitive. Copy them or enter them in exactly as they are shown to avoid permissions errors.

Accessing Data Using SAS OnDemand for Academics: Enterprise Miner

The SAS server includes various SAS libraries (and their corresponding SAS data sets). In addition, if course files and SAS data sets have been uploaded to the SAS server, then you can access these SAS data sets as well. In addition, if course files and SAS data sets

have been uploaded to the SAS server, then you can access these SAS data sets as well. To access sample data sets on the SAS server:

1. Start SAS OnDemand for Academics: Enterprise Miner.
2. Create a new project or open an existing project.
3. In the tree on the left, right-click **Data Source** and then select **Create Data Source**.
4. The **Source** menu defaults to **SAS Table.** Click **Next** to accept the default value and move to the next step in the wizard.
5. Next to the **Table** field (which will be blank), click **Browse**.
6. Use the **Library** menu to select the appropriate library.
7. Select the SAS data set that you want to use and then continue with the wizard.

Accessing SAS Enterprise Miner Course Data on the SAS Server

In addition, SAS OnDemand for Academics stores SAS data sets associated with the teaching materials from SAS Enterprise Miner courses on the SAS server. To view these:

1. Start SAS OnDemand for Academics: Enterprise Miner.
2. Create a new project or open an existing project.
3. In the tree on the left, right-click **Data Source** and then select **Create Data Source**.
4. Select **Source ▸ Metadata Repository** and then click **Next**.
5. Next to the **Table** field, click **Browse**.
6. Use the **Library** menu to select the appropriate library.
7. Select the SAS data set that you want to use and then continue with the wizard or data files to the SAS server for use in specific courses.

Accessing Grayed-out SAS Libraries from the SAS Server

The SAS server includes sample SAS data sets that you might choose to use. Some of the sample SAS libraries might appear to be grayed out, but they are still available for use.

Typically, grayed-out SAS libraries appear for users in Europe and were originally intended for use with SAS Enterprise Miner.

1. Start SAS OnDemand for Academics: Enterprise Miner and log on.
2. Select **File ▸ Open ▸ Data**.
3. Select **Servers**.
4. Double click **SAS Apps**.
5. Double click **Libraries**.
6. Right-click on the grayed-out SAS library that you would like to access and then click **Assign**.
7. Double click the SAS data set that you want to use.

Working with Projects

SAS OnDemand for Academics: Enterprise Miner uses the SEMMA model to organize data mining projects.

Understanding Project Storage Quotas

Each SAS OnDemand for Academics: Enterprise Miner user has a large project storage quota. An e-mail message is sent to any user who has used 75% of their storage quota.

If the project storage quota is reached, then SAS OnDemand for Academics: Enterprise Miner stops functioning properly. To avoid this, consider deleting any unnecessary projects before reaching your quota to ensure that SAS OnDemand for Academics: Enterprise Miner continues to work properly.

If you do reach your quota and then delete unnecessary projects to create more project storage space, then the last project that you were working with could be impacted. If the project runs incorrectly after removing unnecessary projects, then you might need to rebuild the diagrams for this project.

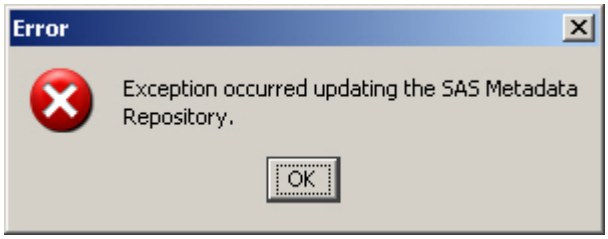
Creating New Projects

When you create a new project, you use the **Create New Project** wizard. Step 3 of this wizard enables you to select a SAS folder in which to store your project. Even though you have the ability to browse in this step, accept the default project storage location:

`/Users/`*`your-user-id`*`/My Folder`

Accepting the default project storage location ensures that your projects can be accessed appropriately by SAS OnDemand for Academics servers.

If you select **Browse** and attempt to store your project in a location other than the default, the following error is displayed:



To correct this error, change the location where your project will be stored back to the default location: `/Users/`*`your-user-id`*`/My Folder`

Opening Existing Projects

To find and open an existing project:

1. Start SAS OnDemand for Academics: Enterprise Miner.
2. Click **Open Project**.
3. From the Open Project window, open the **My Folder** folder.
4. Select the project that you want to open.
5. Click **OK**.

Creating Model Packages

With SAS OnDemand for Academics: Enterprise Miner, users can create model packages (also known as SAS Package Files or .spk files). Model packages can be created from any node in a diagram. Typically, you create a model package when you are satisfied with your model and you want to preserve it or share it with someone else.

In most cases, you create the model package from the last node of a process in a diagram. This ensures that the model package includes the entire process flow.

Differences between Project Model Packages and Exported Project Diagrams

With SAS OnDemand for Academics: Enterprise Miner, a user can create a model package and send it as a SAS Package File (.spk), or export a diagram as an XML file (.xml). If a specific project takes a long time to run, then having the model package (with the associated results) can be advantageous.

Exported diagrams contain no results. After a project's diagram has been exported as an XML file, it can be shared as an attachment in an e-mail message or by placing the file on a shared network directory. To use the shared file, it must be imported in to SAS OnDemand for Academics: Enterprise Miner and then the appropriate path of the diagram would have to be run to produce results.

Note that neither model packages nor exported diagrams include the actual data that is referenced. To rerun the project, you must have access to the original data or use the LIBNAME statement that points to the original data if that data is stored on the SAS server.

Sharing Homework Assignments

There are three ways that you can share homework assignments: either by creating and registering a project model package, by sharing a project model package, or by sharing a project diagram.

Submitting Homework Assignments

With SAS OnDemand for Academics: Enterprise Miner, students can create and submit an entire project model package, or export a project diagram and share the exported file.

Ultimately, the choice is up to the instructor. The decision might be made based on whether the instructor needs access to project results or diagram files.

To Submit a Project Model Package to an Instructor

1. Create a project or open an existing project within SAS OnDemand for Academics: Enterprise Miner.
2. Highlight the appropriate node within a diagram.
3. Select **Actions ▸ Create Model Package**.
4. In the Input dialog box, enter a name for the model package. To ensure that you choose a unique filename, you might want to include your name or initials as part of the filename. This ensures that an instructor can distinguish one submitted model package from another.
5. From the Project Panel on the left side of SAS OnDemand for Academics: Enterprise Miner, expand the **Model Packages** folder.

6 Right-click on the appropriate model and then click **Save As**. You are prompted to save the model as a SAS Package File (.spk).

7 Share the appropriate .spk file with your instructor (through e-mail or through a shared network directory).

To Submit an Exported Project Diagram to an Instructor

1 Create a project or open an existing project within SAS OnDemand for Academics: Enterprise Miner. Ensure that your project includes a diagram.

2 From the Project Panel on the left side of SAS OnDemand for Academics: Enterprise Miner, expand the **Diagrams** folder.

3 Right-click on the appropriate diagram and then select **Save As**. Save the diagram as an .XML file. To ensure that you choose a unique filename, you might want to include your name or initials as part of the filename. This ensures that an instructor can distinguish one submitted diagram from another.

4 Share the .XML file with your instructor (through e-mail or through a shared network directory).

Collaborating

Students can collaborate with each other while using SAS OnDemand for Academics: Enterprise Miner in one of two ways:

- by saving an entire project as a model package and then sharing the model package
- by exporting project diagrams as XML files and then sharing those files with each other

The choice might be determined by whether the students need to share the results of a project. Exported diagrams do not contain results while model packages do.

Note: Neither model packages nor exported diagrams include the actual data that is referenced. To rerun the project, you must have access to the original data or have the LIBNAME that points to the original data if that data is stored on the SAS server.

To Share a Project Model Package

1 Create a project or open an existing project within SAS OnDemand for Academics: Enterprise Miner.

2 Highlight the appropriate node within a diagram.

3 Select **Actions ▸ Create Model Package**.

4 In the Input dialog box, enter a name for the model package. To ensure that you choose a unique filename, you might want to include your name or initials as part of the filename. This ensures that your peers can distinguish one model package from another.

5 From the Project Panel on the left side of SAS OnDemand for Academics: Enterprise Miner, expand the **Model Packages** folder.

6 Right-click on the appropriate model package and then select **Save As**. Save the model package as an .spk file.

7 Share the .spk file as needed (through e-mail or through a shared network directory).

Note: The user who receives the model package can start SAS OnDemand for Academics: Enterprise Miner and choose **File ▸ Open Model Package** to open the package and view the diagram and results. The user is unable to make any changes or rerun the diagram nodes. However, the user can choose **Action ▸ Recreate Diagram** to re-create the diagram within the current project. Once the diagram is re-created, the user has a working copy of the diagram, just as if they imported the appropriate diagram.xml. The user must run a diagram path to produce any results.

To Share a Project Diagram

1. Create a project or open an existing project within SAS OnDemand for Academics: Enterprise Miner. Ensure that your project includes a diagram.
2. From the Project Panel on the left side of SAS OnDemand for Academics: Enterprise Miner, expand the **Diagrams** folder.
3. Right-click on the appropriate diagram and then select **Save As**. Save the diagram as an .XML file. To ensure that you choose a unique filename, you might want to include your name or initials as part of the filename. This ensures that your peers can distinguish one diagram from another.
4. Share the .XML file as needed (through e-mail or through a shared network directory).

To Use a Shared Project Diagram

1. Start SAS OnDemand for Academics: Enterprise Miner.
2. Create a new project or open an existing project.
3. Select **File ▸ Import Diagram from XML**.
4. Import the appropriate diagram XML file.

Step 5. Finding Help for Common Problems

Check the commonly asked questions about SAS OnDemand for Academics: Enterprise Miner in this section and follow the procedures below for additional help.

Where Can Students Find Help

Students should be asked to follow the steps below to resolve any support issues that they encounter:

Step 1. Review Commonly Asked Questions, SAS Notes, and SAS Documentation

Use the key word “ondemand academics” to search for issues specific to SAS OnDemand for Academics from these sources:

- “Commonly Asked Questions: SAS OnDemand for Academics: Enterprise Miner” on page 34.
- SAS Notes, a database of common technical issues found at: http://support.sas.com/notes
- SAS Product Documentation at: http://support.sas.com/documentation

Step 2. Contact Your Instructor

If you have questions about using SAS OnDemand for Academics, then contact your instructor. Instructors can point students toward educational resources and help ensure that offerings are used correctly.

If further assistance is needed, then your instructor can contact SAS Technical Support.

Commonly Asked Questions: SAS OnDemand for Academics: Enterprise Miner

- Does SAS OnDemand for Academics: Enterprise Miner have all the same features as SAS Enterprise Miner?

  The version of SAS Enterprise Miner available through SAS OnDemand for Academics does have a few differences.

  - You must accept the default project storage location when creating new projects.
  - Your projects are stored within the **My Folder** folder.
  - Certain nodes are unavailable, might not function properly, or are experimental. For example, the File Import node is unavailable.

- Can I use SAS OnDemand for Academics: Enterprise Miner if I already have SAS Enterprise Miner on my PC?

  Yes. SAS OnDemand for Academics: Enterprise Miner is mutually exclusive from any other version of SAS Enterprise Miner and should not cause any conflicts or reset any file type associations.

  The projects that you create with each version of SAS Enterprise Miner are also mutually exclusive. If necessary, you can save a project diagram XML file created in one version of SAS Enterprise Miner and import it in to another version. However, for this to work, you must have access to the necessary data on the appropriate PC as well.

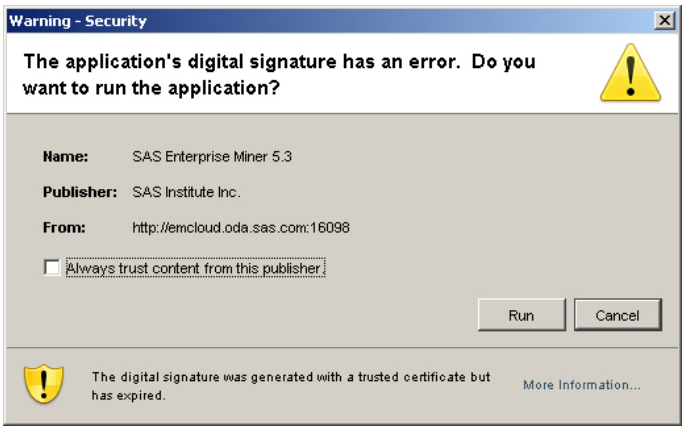
- How do I configure my PC to use SAS OnDemand for Academics: Enterprise Miner?

  In order to use SAS OnDemand for Academics: Enterprise Miner, you must first ensure that your PC is properly configured. It is especially important that the appropriate version of the Java Runtime Environment is installed on your machine. Refer to “Verify and Install a Java Runtime Environment” on page 22.

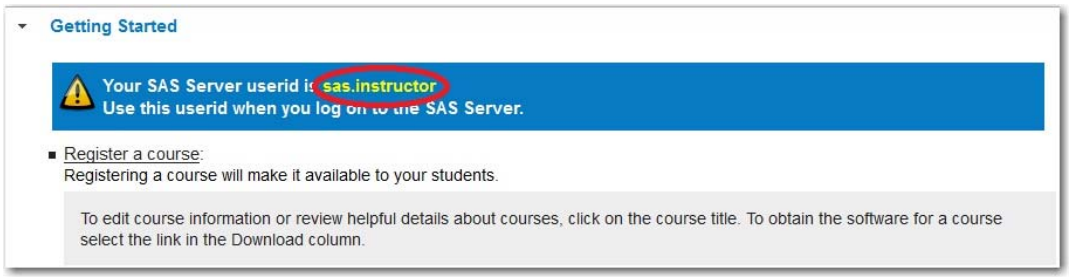
- How do I start SAS OnDemand for Academics: Enterprise Miner?

  After you have configured your system to support SAS OnDemand for Academics: Enterprise Miner, you can start the application by following these steps:

  1. Log on to your SAS OnDemand for Academics Home page.
  2. From the **Manage Courses** area, select **Get Software** next to the appropriate course. Selecting this link opens a window that includes information about how to configure your system as well as how to start the application.
  3. Click the link that is used to start SAS OnDemand for Academics: Enterprise Miner at: https://academic93.oda.sas.com/SASEnterpriseMinerJWS/main.jnlp.
  4. If you are presented with a security warning such as the following, select **Run**.


Warning - Security
The application's digital signature has an error. Do you want to run the application?
Name: SAS Enterprise Miner 5.3
Publisher: SAS Institute Inc.
From: http://emcloud.oda.sas.com:16098
Always trust content from this publisher
Run
Cancel
The digital signature was generated with a trusted certificate but has expired.
More Information...

5 In the **User Name** field, enter your SAS server user ID. This user ID is also displayed on your SAS OnDemand for Academics home page:


Getting Started
Your SAS Server userid is sas.instructor
Use this userid when you log on to the SAS Server.
Register a course:
Registering a course will make it available to your students.
To edit course information or review helpful details about courses, click on the course title. To obtain the software for a course select the link in the Download column.

Note: Your SAS server user ID is case sensitive and should be entered in all lowercase. If you enter your SAS server user ID using uppercase or mixed case letters, then you might be able to log on, but certain tasks might not perform properly.

6 In the **Password** field, enter your SAS profile password. There are two times when you might have supplied a SAS profile password: when you originally created a SAS profile or when you registered for SAS OnDemand for Academics.

7 Click **Log On**.

To start SAS OnDemand for Academics: Enterprise Miner in the future, you can perform the previous steps or use the following URL: https://academic93.oda.sas.com/SASEnterpriseMinerJWS/main.jnlp.

- I receive the following error when trying to log on to SAS OnDemand for Academics: Enterprise Miner: "An RMI registry could not be found...". What should I do?

  This error message typically indicates that you did not complete some or all of the configuration steps necessary. You should review or complete the configuration steps and then try to log on again. You have only to complete the configuration steps once in order to use SAS OnDemand for Academics: Enterprise Miner.

- I receive the following error when trying to log on to SAS OnDemand for Academics: Enterprise Miner: "Could not log on. Contact your administrator for the correct user name and password." What should I do?

  If Microsoft Windows Vista prompted you to block `javaw.exe` when attempting to start SAS OnDemand for Academics: Enterprise Miner and you chose to block the file, then this error message occurs.

To correct this situation, you must open Windows Firewall and unblock the `javaw.exe` file. For example, on Microsoft Windows Vista Home Premium Edition, the following steps might work:

- Select **Start ▸ Control Panel ▸ Windows Firewall**.
- Click the Change Settings link.
- Select the **Exceptions** tab.
- Find `javaw.exe` and make sure it is unchecked.

For more information, refer to Microsoft Windows Vista help or contact your system administrator.

- I receive the following error when trying to log on to SAS OnDemand for Academics: Enterprise Miner: "Network Error. The connection to the Analytics Platform has been lost. This client session must be terminated." What should I do?

  This error message typically occurs if you have left SAS OnDemand for Academics: Enterprise Miner open, but have left it idle for a period of time. Close SAS OnDemand for Academics: Enterprise Miner and restart it to try to resolve the issue.

- I receive the following error in my SAS log when trying to use a SAS catalog file that I have uploaded to the SAS server: "ERROR: File *LIBRARY NAME.CATALOG NAME*.CATALOG was created for a different operating system." What is wrong?

  This error message typically occurs if you have tried to use a SAS catalog file that was created using an operating system other than UNIX.

- How do I save my work in SAS OnDemand for Academics: Enterprise Miner?

  There is no Save button in this application. Your project is automatically saved for you while you work. When you are finished working, select **File ▸ Close this Project** to ensure that your project saves properly.

- How do I submit homework using SAS OnDemand for Academics: Enterprise Miner?

  There are three ways that you can share homework assignments: either by creating and registering a project model package, by sharing a project model package, or by sharing a project diagram. Your instructor will tell you the method that he or she would like you to use.

- How do I collaborate using SAS OnDemand for Academics: Enterprise Miner?

  You can collaborate by sharing an entire project model package or a project diagram. For more information, see these topics: "Differences between Project Model Packages and Exported Project Diagrams" on page 31 and "Collaborating" on page 32.

- Can I use a project model package or project diagram from older versions of SAS Enterprise Miner?

  Some project model packages and project diagrams created in older versions of SAS Enterprise Miner work fine while others do not. If you try to use a project or diagram created with an older version of SAS Enterprise Miner and the application becomes unresponsive, then close the application and avoid using the project model package or project diagram in the future.

- My project or diagram is unresponsive or no longer opens. What is wrong?

  If you have lost a connection to the SAS server while working on your project or diagram or if you did not properly close SAS OnDemand for Academics: Enterprise

Miner, then a lock file might have been created. This lock file could cause your diagram or project to appear unresponsive or it could prevent your diagram or project from opening at all. Try the following to correct the issue:

- If the lock has just happened, then try waiting about five minutes. In many cases, locked files correct themselves.
- If you are unsure of when the lock occurred or if it has been longer than five minutes, then close the project, log off from SAS OnDemand for Academics: Enterprise Miner, and then log back in.
- If the problem persists, then contact SAS Technical Support. Send an e-mail to `support@sas.com`. Specify that you are using SAS OnDemand for Academics: Enterprise Miner.

Notes:

- It is best practice to close your diagrams, projects, or both before exiting SAS OnDemand for Academics: Enterprise Miner or before disconnecting from your Internet connection.
- An open connection to the SAS server will likely disconnect (time out) after one hour if the connection is idle (that is, you have not performed any processing). Many firewalls disconnect open sessions after an hour of idle time, and this could lead to locked files. SAS recommends that you complete your work, save it, and then exit SAS OnDemand for Academics: Enterprise Miner before you leave the computer.

- When I open SAS OnDemand for Academics: Enterprise Miner, I no longer see my projects. What is wrong?

  This behavior can occur if you log on to SAS OnDemand for Academics: Enterprise Miner using a mixed case or upper case SAS server user ID. Close SAS OnDemand for Academics: Enterprise Miner and log on again. Make sure that you use all lowercase letters for your SAS server user ID.

- Can I create a SAS library using SAS OnDemand for Academics: Enterprise Miner?

  No. However, you can work with available SAS libraries or assign LIBNAME statements.

- I have been provided with a LIBNAME statement for my course. How do I assign it?

  If your instructor has provided a LIBNAME statement for your course, you can assign it in one of two ways:

  - Assign the LIBNAME statement as part of your project Start Code to ensure that the SAS library is available throughout your project; this LIBNAME statement will also execute each time you start your project.
  - Assign the LIBNAME statement within a project using the SAS OnDemand for Academics: Enterprise Miner Program Editor window.

- I am using a SAS data set that requires a format file. How do I define the path to the format file?

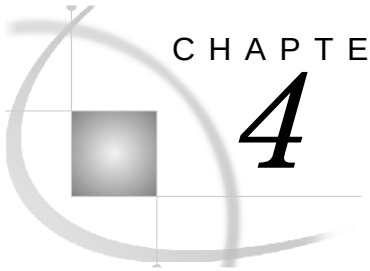
  You can define a path to a format file using project Start Code.

- I either have or might reach my project storage quota. What do I do?

  If you exceed your project storage space quota, then SAS OnDemand for Academics: Enterprise Miner stops processing nodes properly. To resolve this

situation, delete existing projects that you no longer need in order to free up project storage space.

The last project that you created or were working with when you met your project storage space quota could be impacted (even after you delete existing projects to create more space). If such a project appears to run incorrectly, then you might need to rebuild the diagrams for this project.



CHAPTER 4

SAS OnDemand for Academics: Forecast Server

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SAS OnDemand for Academics: Forecast Server

This chapter guides students through recommended steps for registering for and using SAS OnDemand for Academics.

Step 1. Confirm System Requirements

Check these guidelines to ensure you can access the software.

Confirm Requirements for Full Support

Your system must meet these requirements for SAS OnDemand for Academics: Forecast Server to be fully supported.

	Supported	Not Supported
Operating systems	Any system that supports the Sun Microsystems (Oracle) Java Runtime Environment (JRE). Typically, this includes UNIX, Linux, and various Microsoft Windows operating systems, such as Microsoft Windows XP and Microsoft Windows Vista.	Macintosh operating systems are not supported. ***Note:*** Virtualized environments might not work. It is recommended that supported operating systems run on a physical CPU.
Java Runtime Environment	Java Runtime Environment (JRE) Version 1.6.0_24. ***Note:*** You are prompted to check for this JRE and install it when you install SAS Forecast Server.	JRE 1.6.0_20 is not compatible. ***Note:*** Other JREs from the 1.6 series might work.
Hard disk space	At least 50 MB of free hard disk space.	
Internet browser	Any browser that supports JRE 1.6.0_24.	
Internet connection	High speed, including broadband (cable), DSL (phone), and wireless connections. ***Note:*** Individual usage experience depends on speed and reliability of connection.	
Network bandwidth	For best performance, at least 1000 Kbit/sec is recommended.	

Verify and Install a Java Runtime Environment

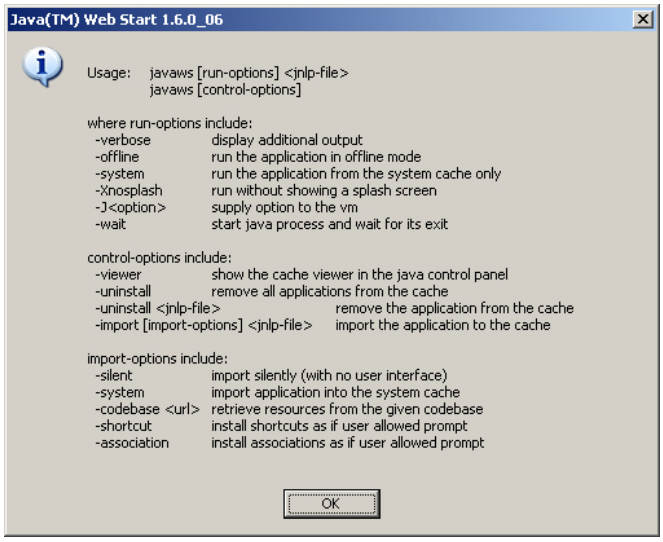
After you have registered for a course that uses SAS OnDemand for Academics: Enterprise Miner, you must verify that you have an appropriate Java Runtime Environment (JRE) installed or install an appropriate JRE. This process needs to be completed only once.

Note: Consider printing these instructions before you begin as some of the steps might require you to move to other websites.

Step 1. Verify Whether a JRE (and Java Web Start) Is Installed

To verify whether you installed a JRE, complete these steps:

1. Open a Command Prompt window. Select **Start ▸ Run**.
2. Type CMD in the Run window.
3. On the Command Prompt window, type start javaws.
4. If the above command opens a Java Web Start window similar to the following, then you have a JRE (and Java Web Start) installed.


Java(TM) Web Start 1.6.0_06
Usage: javaws [run-options] <jnlp-file>
javaws [control-options]
where run-options include:
-verbose display additional output
-offline run the application in offline mode
-system run the application from the system cache only
-Xnosplash run without showing a splash screen
-J<option> supply option to the vm
-wait start java process and wait for its exit
control-options include:
-viewer show the cache viewer in the java control panel
-uninstall remove all applications from the cache
-uninstall <jnlp-file> remove the application from the cache
-import [import-options] <jnlp-file> import the application to the cache
import-options include:
-silent import silently (with no user interface)
-system import application into the system cache
-codebase <url> retrieve resources from the given codebase
-shortcut install shortcuts as if user allowed prompt
-association install associations as if user allowed prompt
OK

If you have a JRE installed, then continue to Step 2. If the above command did not work, then you likely have not installed a JRE. Continue to Step 3.

Step 2. Ensure That You Are Using Only the Recommended Java Runtime Environment

We recommend that you use JRE 1.6.0_24 to run SAS OnDemand for Academics: Forecast Server. Only JREs with U.S. Export Control Classification Numbers of 5D992 are approved for use with SAS products.

Note: Other JREs from the 1.6 series might also work (excluding JRE 1.6.0_20, which is incompatible).

1. From a Command Prompt window, start Java Web Start. Type start javaws -viewer and then press **Enter**.
2. If the Java Cache Viewer window is displayed, then close it so that you can see the Java Control Panel window. The Java Control Panel window often opens behind the Java Cache Viewer window.
3. From the Java Control Panel window, select the **Java** tab.
4. From the **Java Application Runtime Settings** area (the bottom half of the window), click **View** (the second **View** button on the window).
5. In the **Enabled** column, check only one JRE (uncheck any other JREs that are checked). We recommend that you check JRE 1.6.0_24.

If JRE 1.6.0_24 is unavailable, then you can test SAS OnDemand for Academics: Forecast Server with your current JRE. To do so, you can start from your SAS OnDemand for Academics Home Page.

If your current JRE does not work or if you want to install the recommended JRE, continue to Step 3. Otherwise, configuration is complete.

Step 3. Install the Recommended Java Runtime Environment and Java Web Start

Installing the recommended JRE also installs Java Web Start on your system.

Note: If you completed Step 2 above, repeat this step to ensure that only JRE 1.6.0_24 is selected.

Access the appropriate list of Java SE Downloads at this location: http://www.oracle.com/technetwork/java/javasebusiness/downloads/java-archive-downloads-javase6-419409.html#jre-6u24-oth-JPR

1. Click the radio button above the table to Accept License Agreement.
2. Select **jre-6u24-windows-i586.exe** under **Download** column.
3. You are prompted to sign in to your Oracle web account. If you do not have an account, then you are prompted to create one.
4. After you are signed in, launch the download and select **Run** to begin the installation process.
5. (Optional) If you completed Step 2 above, then repeat this step to ensure that only JRE 1.6.0_24 is selected.

Step 2. Set Up Your SAS OnDemand for Academics Account

There are several important steps that you must follow to set up a SAS OnDemand for Academics account, such as creating a SAS profile and registering for your course. The online process uses a series of windows to guide you.

About the SAS OnDemand for Academics Control Center

Your starting point for accessing SAS OnDemand for Academics is the SAS OnDemand for Academics Control Center website. You use it to register, acquire a license, and view course information.

http://support.sas.com/ctx3/sodareg/index.html

Your SAS OnDemand for Academics Home Page is created during the registration process and is part of the SAS OnDemand for Academics Control Center. You are taken to your Student Home Page once you have set up an account. You access your home page to view information associated with courses.

About Your SAS Profile Account

A SAS profile is an account that you can create to access specific information and resources from the SAS website. If you are a current SAS user, then you might already have a SAS profile. If you are a new SAS user, then a SAS profile is created for you when you register for SAS OnDemand for Academics.

An important part of your SAS profile account is a SAS profile password that you are prompted to enter each time you access the SAS OnDemand for Academics Control Center.

Note: Your SAS profile password must be changed every 6 months for security purposes. You will receive an e-mail when your password is approaching expiration. To reset your SAS profile, visit My SAS Profile page at: https://www.sas.com/profile/user/login.htm.

Important Information Before You Begin

As you begin setting up your account, it is helpful to keep the following in mind:

- You will need access to your e-mail account. When you begin registration, you are prompted to enter an e-mail address. Enter the e-mail address of an account that you can access easily while completing your registration.
- You will receive an e-mail during the initial registration process that you must open and act upon to continue. The e-mail prompts you to click a link to verify your e-mail address. Its primary purpose is to confirm that you are using a valid e-mail address and that someone else is not attempting to register you without your knowledge.
- If you do not receive the e-mail, then check your junk e-mail folder.

About SAS Forecast Server Environments

SAS Forecast Server requires that an environment be established and that projects exist within an environment. With SAS OnDemand for Academics: Forecast Server, each course is set up to be its own environment by default. Any user within that course is automatically a part of that environment and can create and work with projects within that environment.

SAS Forecast Server is also a collaborative tool. This means that all users within a specific course can view and work with the projects in that course's environment.

Register for a Course

You must register to select and get access to the SAS software being used for the course. During registration, you must select a university, an instructor, and a course.

1. Visit the SAS OnDemand for Academics Control Center to begin: http://support.sas.com/ctx3/sodareg/index.html.
2. Enter your e-mail address in the text box to get started.
3. Follow the instructions.

Visit the following location to print or view step-by-step instructions: http://support.sas.com/ondemand/manuals/forecast_server_student.pdf.

Step 3. Access and Use the Software

Ideally, you should perform this step before you begin your first assignment using SAS OnDemand for Academics software.

Access Your SAS OnDemand for Academics Account

Your SAS OnDemand for Academics account enables you to view and edit information that is associated with your courses. You will have access to this information after you have initially registered for SAS OnDemand for Academics.

To access an existing SAS OnDemand for Academics account:

1. Access the SAS OnDemand for Academics Control Center at: http://support.sas.com/ctx3/sodareg/index.html

2 Enter your e-mail address and your SAS profile password and then click **Enter**.

Locate the Name of Your SAS Forecast Server Environment

Each course registered using SAS Forecast Server has a unique course environment. Students can locate the name of their course environment by following these steps:

1 Log on to your SAS OnDemand for Academics Home page.

2 From the Course table, locate the appropriate course.

3 Click **Get Software**.

4 Review the section called Starting SAS OnDemand for Academics: Forecast Server. The environment for your course is listed in step 3.

Access SAS Forecast Server

After you have reconfigured your system to support SAS OnDemand for Academics: Forecast Server, you can start the application by following these steps:

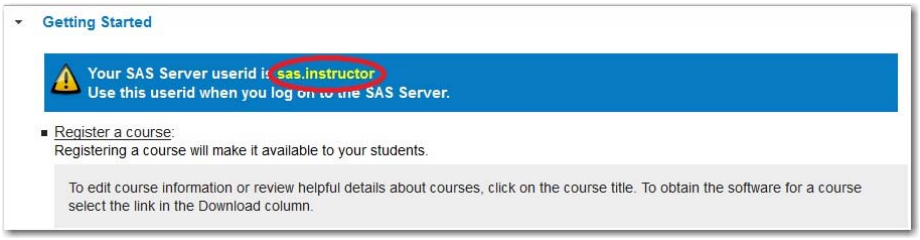
1 Log on to your SAS OnDemand for Academics Home page.

2 From the **Manage Courses** area, select **Get Software** next to the appropriate course. Selecting this link opens a window that includes information about how to configure your system as well as how to start the application.

3 Click the link that is used to start SAS OnDemand for Academics: Forecast Server at: https://academic93.oda.sas.com/SASForecastServer/main.jnlp.

4 If you are presented with a security warning, select **Run**.

5 In the **User Name** field, enter your SAS server user ID. This user ID is also displayed on your SAS OnDemand for Academics home page:


Getting Started
Your SAS Server userid is sas.instructor
Use this userid when you log on to the SAS Server.
Register a course:
Registering a course will make it available to your students.
To edit course information or review helpful details about courses, click on the course title. To obtain the software for a course select the link in the Download column.

Note: Your SAS server user ID is case sensitive and should be entered in all lowercase. If you enter your SAS server user ID using uppercase or mixed case letters, you might be able to log on, but certain tasks might not perform properly.

6 In the **Password** field, enter your SAS profile password. There are two times when you might have supplied a SAS profile password: when you originally created a SAS profile or when you registered for SAS OnDemand for Academics.

7 Click **Log On**.

To start SAS OnDemand for Academics: Forecast Server in the future, you can perform the previous steps or simply save the following URL as a bookmark and use it: https://academic93.oda.sas.com/SASForecastServer/main.jnlp

Access the SAS Server

You are prompted to connect to the SAS server each time you start SAS OnDemand for Academics: Forecast Server. The server (which is hosted at SAS Institute Inc.) remotely processes any submitted SAS files or projects and returns results to your computer.

Make sure that you have a working Internet connection if you are unable to use a SAS OnDemand for Academics software application to perform processing. If your Internet connection is working normally and you are still unable to perform processing, it is likely that the SAS server is temporarily unavailable. Try to use the server again later. You can also log on to the SAS OnDemand for Academics Control Center. The SAS OnDemand for Academics Control Center typically provides a message if the SAS server is unavailable or expected to be unavailable in the near future.

SAS Server Maintenance and Availability

SAS makes its best efforts to make the server available as much as possible and to keep unexpected downtime to a minimum. There could be limited times when the server is unavailable because SAS is performing maintenance, testing, or performance enhancement tasks.

- If server maintenance is needed, then SAS will try to perform this work during nontraditional usage hours to lessen any impact to users.
- SAS uses the third Saturday of each month to perform scheduled maintenance on its systems (if needed). Therefore, the server might be unavailable for a portion of time on the third Saturday of each month.

To determine whether SAS servers are available, visit the SAS server status web page at: https://www.ondemand.sas.com/status/oda/.

Requesting SAS Server Availability Notification

If you would like to be notified when the SAS server is unavailable due to extended maintenance or due to unforeseen circumstances, then subscribe to the `SASONDEMANDSERVER-L` mailing list:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `subscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed). Follow any instructions that you receive via e-mail.

To unsubscribe from SASONDEMANDSERVER-L:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `unsubscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed).

Step 4. Review the Basics for Working with Data and Results

Before attempting course exercises, we recommend that you review the basics of working with SAS data sets, models, and results in SAS OnDemand for Academics: Forecast Server.

About Project Storage

By default, all SAS OnDemand for Academics: Forecast Server projects are stored on the SAS server. Due to the architecture of this offering, there is no way to save your projects locally.

The large size of projects and their forecasts might also prove to be problematic to save locally. In a teaching setting, sharing the results of your forecasting projects should be sufficient.

Working with Forecasting Project Results

Students can share their results (graphs) with instructors should that be necessary to support course assignments. Instructors can also save or share the results of their forecasting project work:

1. Start SAS OnDemand for Academics: Forecast Server.
2. Open the appropriate project.
3. Rerun the project (if necessary) to produce the appropriate graph.
4. Select **Tools ▸ Reports and Stored Processes**.
5. From the Output Options, select a report format and then click **Run**.
6. Save the report or export the report data to another program. For example, if you choose HTML as the report format, you can generate the report, right-click on the report, and then export the data to Microsoft Excel. If you choose CSV as the report format, then the report generates within Microsoft Excel (provided that you have the application) by default.
7. Share the report as needed.

Step 5. Help for Common Problems

Check the commonly asked questions about SAS OnDemand for Academics: Forecast Server in this section and follow the procedures below for additional help.

Where Can Students Find Help?

Students should be asked to follow the steps below to resolve any support issues that they encounter:

Step 1. Review Commonly Asked Questions, SAS Notes, and SAS Documentation

Use the key word “ondemand academics” to search for issues specific to SAS OnDemand for Academics from these sources:

- “Commonly Asked Questions for SAS OnDemand for Academics: Forecast Server” on page 47
- SAS Notes, a database of common technical issues found at: http://support.sas.com/notes
- SAS Product Documentation at: http://support.sas.com/documentation

Step 2. Contact Your Instructor

If you are a student and you have questions about using SAS OnDemand for Academics, contact your instructor. Instructors can point students toward educational resources and help ensure that offerings are used correctly.

If further assistance is needed, then your instructor can contact SAS Technical Support.

Commonly Asked Questions for SAS OnDemand for Academics: Forecast Server

- How do I configure my PC to use SAS OnDemand for Academics: Forecast Server?

  In order to use SAS OnDemand for Academics: Forecast Server, you must first ensure that your PC is properly configured and that you installed the appropriate Java Runtime Environment. For step-by-step instructions, see "Step 1. Confirm System Requirements" on page 39.

- How do I start SAS OnDemand for Academics: Forecast Server?

  After you have configured your system to support SAS OnDemand for Academics: Forecast Server, you can start the application:

  1. Log on to your SAS OnDemand for Academics Home page.
  2. From the Manage Courses area, select **Get Software** next to the appropriate course. Selecting this link opens a window that includes information about how to configure your system as well as how to start the application.
  3. Click the link that is used to start SAS OnDemand for Academics: Forecast Server at: https://academic93.oda.sas.com/SASForecastServer/main.jnlp.
  4. If you are presented with a security warning when you attempt to start SAS OnDemand for Academics: Forecast Server, select **Run**.
  5. In the **User Name** field, enter your SAS server user ID. This user ID is also displayed on your SAS OnDemand for Academics home page.

     Note: Your SAS server user ID is case sensitive and should be entered in all lowercase. If you enter your SAS server user ID using uppercase or mixed case letters, then you might be able to log on, but certain tasks might not perform properly.
  6. In the **Password** field, enter your SAS profile password. There are two times when you might have supplied a SAS profile password: when you originally created a SAS profile or when you registered for SAS OnDemand for Academics.
  7. Click **Log On**.

     To start SAS OnDemand for Academics: Forecast Server in the future, you can perform the previous steps or simply use the following URL: https://academic93.oda.sas.com/SASForecastServer/main.jnlp.

- When I start SAS OnDemand for Academics: Forecast Server, the software application appears to be named SAS Forecast Studio. Am I using the correct software?

  Yes. SAS Forecast Server is the name of the software offering. However, SAS Forecast Studio is the name of the graphical user interface that is used to access SAS Forecast Server functionality.

- What is the name of my SAS Forecast Server Environment?

Each course registered using SAS Forecast Server has a unique course environment.

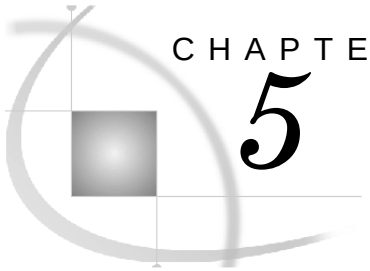
Students must contact their instructor if they do not know which environment to select.

- How do I select a SAS Forecast Server Environment?

  You can select your course environments by doing the following:

  1. Log on to SAS Forecast Server.
  2. From the Project window, select your course environment from the **Environment** menu.

  Note: Students must contact their instructors if they do not know which environment to select.



CHAPTER 5

SAS OnDemand for Academics: Web Editor

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Commonly Asked Questions: SAS OnDemand for Academics: Web Editor 56

SAS OnDemand for Academics: Web Editor

This manual guides students through recommended steps for registering for and using SAS OnDemand for Academics.

Step 1. Confirm System Requirements

A web browser is required to use SAS OnDemand for Academics: Web Editor. SAS Web Editor currently supports Microsoft Internet Explorer 9+ (Microsoft Internet Explorer 10+ is recommended for certain features, such as the ability to drag and drop files), Google Chrome 21, Mozilla FireFox 14 on Windows7, Mozilla FireFox 15 on Mac OS X, Apple Safari 5.1 on Windows 7, and Apple Safari 6.0 on Mac OS X. You must enable cookies.

These versions were tested at the time of publication and newer versions of these web browsers might not work.

Various mobile devices might work with the SAS Web Editor such as tablets and readers. SAS Web Editor supports iOS6 and above for Apple devices such as the iPad. The minimum display size (resolution) required to run SAS Web Editor is 1024 x 768 pixels (in either portrait or landscape mode).

Connectivity

If your wireless connection is lost, then a message is displayed stating that your network connection is no longer available. When the connection is available, the application attempts to reconnect automatically.

Avoid refreshing your web browser. This results in a loss of any work that has not been saved. Most web browsers provide a warning to let you know that your work is lost if you choose to proceed with a page refresh or reload.

Step 2. Set Up Your SAS OnDemand for Academics Account

There are several important steps that you must follow to set up a SAS OnDemand for Academics account, such as creating a SAS profile and registering for your course. The online process uses a series of windows to guide you.

About the SAS OnDemand for Academics Control Center

Your starting point for accessing SAS OnDemand for Academics is the SAS OnDemand for Academics Control Center website. You use it to register, acquire a license, and view course information.

https://support.sas.com/ctx3/sodareg/index.html

Your SAS OnDemand for Academics Home Page is created during the registration process and is part of the SAS OnDemand for Academics Control Center. You are taken to your Student Home Page once you have set up an account. You access your home page to register for or view information associated with courses.

About Your SAS Profile Account

A SAS profile is an account that you can create to access specific information and resources from the SAS website. If you are a current SAS user, then you might already have a SAS profile. If you are a new SAS user, then a SAS profile is created for you when you register for SAS OnDemand for Academics.

An important part of your SAS profile account is a SAS profile password that you are prompted to enter each time you access the SAS OnDemand for Academics Control Center.

Note: Your SAS profile password must be changed every 6 months for security purposes. You will receive an e-mail when your password is approaching expiration. To reset your SAS profile, visit My SAS Profile page at this location: http://www.sas.com/profile/user/login.htm

Important Information Before You Begin

As you begin setting up your account, it is helpful to keep the following in mind:

- You will need access to your e-mail account. When you begin registration, you are prompted to enter an e-mail address. Enter the e-mail address of an account that you can access easily while completing your registration.
- You will receive an e-mail during the initial registration process that you must open and act upon to continue. The e-mail prompts you to click a link to verify your e-mail address. Its primary purpose is to confirm that you are using a valid e-mail address and that someone else is not attempting to register you without your knowledge.
- If you do not receive the e-mail, then check your junk e-mail folder.

Register for a Course

You must register to select and get access to the SAS software being used for the course. During registration, you are required to select a university, an instructor, and a course. Visit the SAS OnDemand for Academics Control Center to begin:
https://support.sas.com/ctx3/sodareg/index.html

1. Enter your e-mail address in the text box to get started.
2. Follow the instructions.

Visit the following location to print step-by-step instructions:
http://support.sas.com/ondemand/manuals/SASWebEditorStudent.pdf

Step 3. Access and Use the Software

Ideally, you should perform this step before you begin your first assignment using SAS OnDemand for Academics software.

Access Your SAS OnDemand for Academics Account

Your SAS OnDemand for Academics account enables you to view and edit information that is associated with courses. You will have access to this information after you have initially registered for SAS OnDemand for Academics.

To access an existing SAS OnDemand for Academics account:

1. Access the SAS OnDemand for Academics Control Center at: https://support.sas.com/ctx3/sodareg/index.html.
2. Enter your e-mail address and your SAS profile password and then click **Enter**.

Access the SAS Server

You are prompted to connect to the SAS server each time you start SAS OnDemand for Academics: Web Editor. The server (which is hosted at SAS Institute Inc.) remotely processes any submitted SAS files or projects and returns results to your computer.

If you are unable to use a SAS OnDemand for Academics software application to perform processing, then make sure that you have a working Internet connection.

If your Internet connection is working normally, then you can check the SAS server status web page at https://www.ondemand.sas.com/status/oda/ to determine whether appropriate servers are available or temporarily down for maintenance.

Avoid Connection Time-outs

Avoid leaving open connections on the server. An open connection to the SAS server and the SAS Web Editor expires after one hour (or less) if the connection is idle (that is, you have not performed any processing). Many firewalls disconnect open sessions after an hour of idle time (or less). It is best practice to complete your work, save it, and then exit SAS OnDemand for Academics: Web Editor before you leave the computer.

SAS Server Maintenance and Availability

SAS makes its best efforts to make the server available as much as possible and to keep unexpected downtime to a minimum. There could be limited times when the server is unavailable because SAS is performing maintenance, testing, or performance enhancement tasks.

- If server maintenance is needed, then SAS will try to perform this work during nontraditional usage hours to lessen any impact to users.
- SAS uses the third Saturday of each month to perform scheduled maintenance on its systems (if needed). Therefore, the server might be unavailable for a portion of time on the third Saturday of each month.

To determine whether SAS servers are available, visit the SAS server status web page at: https://www.ondemand.sas.com/status/oda/.

Requesting SAS Server Availability Notification

If you would like to be notified when the SAS server is unavailable due to extended maintenance or due to unforeseen circumstances, then subscribe to the `SASONDEMANDSERVER-L` mailing list:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `subscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed). Follow any instructions that you receive via e-mail.

To unsubscribe from SASONDEMANDSERVER-L:

1. Send e-mail to `LISTSERV@LISTSERV.SAS.COM`.
2. In the body of the e-mail, type `unsubscribe SASONDEMANDSERVER-L`.
3. Send the e-mail (no subject line is needed).

Step 4. Review the Basics for Working with Data and Results

Before attempting course exercises, we recommend that you review the basics of working with SAS data sets and results in SAS OnDemand for Academics: Web Editor.

Working with Data

To ensure that you do not lose your work, you should cover the basics of uploading and downloading files from the SAS server.

Storing Data

There are two ways to store data for use with SAS OnDemand for Academics:

- Instructors can choose to store data for course exercises on the SAS server. You can access the data using a LIBNAME or FILENAME statement that your instructor provides you.
- Instructors or students can store the data that they want to use on a data source that can connect to their PC. Sources could include a local file system, university space (such as AFS or NFS space), or portable disk drives.

Accessing Data Using SAS OnDemand for Academics: Web Editor

The SAS server includes sample SAS data sets that you might choose to use. In addition, if course files and SAS data sets have been uploaded to the SAS server, then you can access these SAS data sets as well. To access the SAS data sets:

1. Log on to the SAS Web Editor using your user ID and password.
2. Open or create a new project.
3. Select **Libraries** in the navigation pane.
4. Double click the appropriate library (such as MAPS, SASHELP, or the library that you have assigned using a LIBNAME statement).
5. Double click the SAS data set that you want to use.

Note: If you modify a SAS data set that exists on the SAS server and you want to save that SAS data set, then you must download the data set to a local drive. If you do not, then your modifications are lost when you end your session.

In addition, some of the SAS data sets that are available from the SAS server might be too large to download locally unless you have modified them to make them smaller. In this case, it is recommended that you work with the original SAS data sets only while connected to the SAS server.

To easily reference your project, use the predefined macro `&PROJECTS_DIR.`

Here is an example:

```
ods html path="&PROJECTS_DIR" file="test.html" sge=on;
proc sgplot data=sashelp.class;
vbar age;
run;
ods html close;
```

Working with Compressed SAS Data Sets

SAS does not recommend that you work with compressed SAS data sets when using SAS OnDemand for Academics: Web Editor. If you have a compressed SAS data set, then you can use the COMPRESS=NO option to remove compression.

Assigning LIBNAME and FILENAME Statements

The SAS server is unable to recognize or access the local drives of your PC. Therefore, if your SAS program includes a LIBNAME or FILENAME statement that refers to a local path (such as a location on your C: drive), then you receive processing errors.

Instructors have the ability to store SAS data sets and other data files on the SAS server. If your instructor has taken advantage of this feature, then you will receive either a LIBNAME statement or a FILENAME statement from your instructor that you can use to access the appropriate data.

Note: LIBNAME or FILENAME statements are case sensitive. Copy them or enter them in exactly as they are shown to avoid permissions errors.

If you do have local SAS data sets that you want to use, then it is recommended that you upload them. You can then refer to the uploaded SAS data sets in your code or in your projects. In addition, if you modify the SAS data sets that you upload and you want to use them again, then you should download the SAS data sets from the SAS server prior to exiting SAS OnDemand for Academics.

Accessing Data with LIBNAME or FILENAME Statements

Once a SAS data set or a data file has been uploaded to the SAS server, users can access the data using the appropriate LIBNAME or a FILENAME statement. The LIBNAME or FILENAME statement to use is provided to you during the course registration process. To access this information at any time:

1. Log on to your SAS OnDemand for Academics Home Page.
2. Start SAS OnDemand for Academics: Web Editor.
3. Create or open a SAS program.
4. Assign the LIBNAME or FILENAME statement in your code in order to access your data. Remember LIBNAME and FILENAME statements are case sensitive.

Working with INFILE Statements

An INFILE statement identifies an external data file to read with an INPUT statement. If you plan to use an INFILE statement or are asked to use an INFILE statement to access data, then you must use a fully qualified path in your statement.

For example, if `country.dat` exists in a course directory called `/courses/u_0/i_123/c_105`, then the INFILE statement to access this data file would be:

```
infile '/courses/u_0/i_123/c_105/country.dat';
```

However, if you specified a path that is not fully qualified (such as the following), then an error would be produced:

```
infile 'country.dat';
```

Students must use the INFILE statement (with the fully qualified path) that your instructor provides.

Working with INFILE Statements and Microsoft Windows Data Files

If you import or upload a raw data file (such as a text file or a comma-separated-value file) from a PC using the Microsoft Windows operating system, then the file might

contain carriage-return characters. These carriage-return characters cause errors when you attempt to read the file on the UNIX version of SAS used by SAS OnDemand for Academics servers.

For example, using the following INFILE statement could cause data processing or data display errors:

```
infile newemps dlm=',';
```

These errors can be avoided by using the following INFILE statement:

```
infile newemps dlm=',' TERMSTR=CRLF;
```

For more information about the TERMSTR option, search for TERMSTR in SAS 9.3 Online Documentation at http://support.sas.com/documentation.

Working with Results

You can download your results in the following file types from the SAS Web Editor:

- html
- .pdf
- .rtf

To download your results, select the **Results** tab and click either:

- Download as an HTML file
- Download as a PDF file
- Download as an RTF file

Step 5. Finding Help for Common Problems

Check the “Commonly Asked Questions: SAS OnDemand for Academics: Web Editor” on page 56 and follow the procedures below for additional help.

Where Can Students Find Help?

Students should be asked to follow the steps below to resolve any support issues that they encounter:

Step 1. Review Commonly Asked Questions, SAS Notes, and SAS Documentation

Use the key word “ondemand academics” to search for issues specific to SAS OnDemand for Academics from these sources:

- “Commonly Asked Questions: SAS OnDemand for Academics: Web Editor” on page 56
- SAS Notes, a database of common technical issues found at http://support.sas.com/notes
- SAS Product Documentation at http://support.sas.com/documentation

Step 2. Contact Your Instructor

If you are a student and you have questions about using SAS OnDemand for Academics, then contact your instructor. Instructors can point students toward educational resources and help ensure that offerings are used correctly.

If further assistance is needed, then your instructor can contact SAS Technical Support.

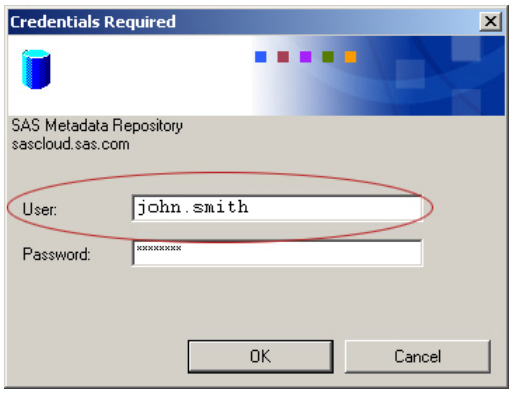
Commonly Asked Questions: SAS OnDemand for Academics: Web Editor

- Does SAS OnDemand for Academics: Web Editor have all the same features as SAS?

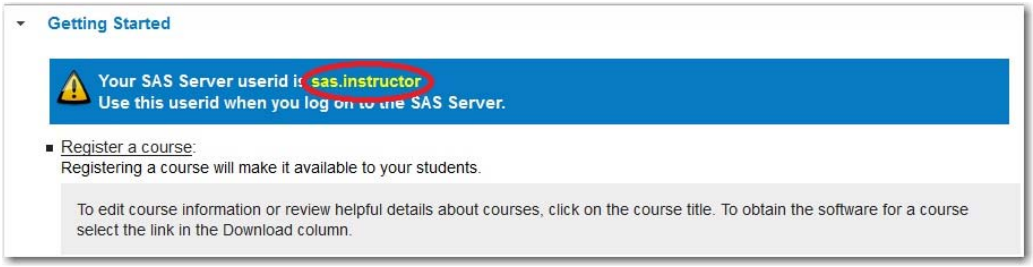
  Certain features of SAS OnDemand for Academics: Web Editor have been disabled because they are not practical in this setting. For example, the ability to schedule projects is not available. Note that the online Help system documents all SAS Web Editor features, including those that might be unavailable in this offering.

- How do I log on to SAS OnDemand for Academics?

  When you open SAS OnDemand for Academics, the Credentials Required window is displayed:



  You must use this window to log on to the SAS server (the SAS Metadata Repository) so that you can perform SAS processing.


Getting Started
Your SAS Server userid is sas.instructor
Use this userid when you log on to the SAS Server.
Register a course:
Registering a course will make it available to your students.
To edit course information or review helpful details about courses, click on the course title. To obtain the software for a course select the link in the Download column.

  To log on, enter the following information:

  1. In the **User** field, enter your SAS server user ID. This user ID is also displayed on your SAS OnDemand for Academics Home Page.
  2. In the **Password** field, enter your SAS profile password. There are two times when you might have supplied a SAS profile password: when you originally created a SAS profile or when you registered for SAS OnDemand for Academics.

- How do I find out more information about using SAS OnDemand for Academics: Web Editor?

  After you have logged in to the SAS Web Editor, you can refer to the options on its **Help** menu. You can also refer to the "Learning Resources for SAS OnDemand for Academics" appendix in this manual.

- Can I access the Program Editor, Log, and Output windows using SAS OnDemand for Academics: Web Editor?

  Yes. Select the **Code** tab to access the Program Editor. Select the **Log** tab to see the SAS log. Select the **Results** tab to see the results.

- How do I work with data in SAS OnDemand for Academics: Web Editor?

  SAS OnDemand for Academics: Web Editor works in conjunction with the SAS server. The easiest way to work with data is to ensure that the SAS server has access to that data. You can do this by using existing sample data sets on the SAS server, uploading data files to the SAS server, or accessing data that an instructor has chosen to store on the SAS server.

- Does SAS Web Editor save my files when I sign out or close my browser?

  Unless you are using the Apple Safari browser, you will be prompted by the application to save your files if they contain unsaved changes.

  Apple Safari prompts you only when you sign out. If you exit the browser, close the browser tab, refresh the browser page, or navigate to a different browser page, Safari will not prompt you, and your unsaved changes are lost.

- How do I share data with other users who are using SAS OnDemand for Academics: Web Editor?

  Only instructors have the ability to store data on the SAS server. Once the data is stored, instructors can share a LIBNAME or FILENAME statement with users so that they can access the data.

- Can I use data other than SAS data sets?

  Yes. If your instructor has stored data files other than SAS data sets on the SAS server, then he or she will provide you with a FILENAME statement that you can use to access the data.

- My code is not producing any graphs. What am I doing wrong?

  SAS Web Editor only supports the default device of PNG for html. If you specify devices such as GIF, JPEG, ACTXIMG, ACTIVEX, and so on, then your graphs are not produced and no warnings or errors are given.

- I am trying to use an INFILE statement to access data, but it is causing errors. How should I use an INFILE statement?

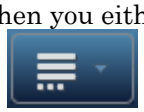
  You must use a fully qualified path when using an INFILE statement within SAS OnDemand for Academics: Web Editor. In addition, INFILE statements are case sensitive. Ensure that you are entering the INFILE statement appropriately. Refer to "Working with INFILE Statements" on page 54.

- I have copied code in to the code (Program) window, but I am getting errors when I try to run the code. What is happening?

  This could be the result of hidden or special characters in the code that you copied in to the code window. One way to resolve this issue is to enter the code instead of copying the code. If the amount of code is too much to enter, then you could try saving the code as a text file to remove any special characters or formatting and

then copying the code in to the Code window. For more information and options, search for SAS Note 16658 on http://support.sas.com/notes.

- How do I save my projects or files from within SAS OnDemand for Academics: Web Editor?
- Save your work to a project file within SAS Web Editor. You can then click **Projects Download** from the **Projects** that are in the navigation pane to save your work to your **Downloads** directory on your PC.
- I have to create my file shortcuts every time I log on to the SAS Web Editor. Is there a way that they can be saved once and available for each session?

  You can add your file shortcut to your Autoexec file when you either create a new file shortcut or by selecting **Edit Autoexec File** from  in the banner. The $, @, &, and # characters cannot be used in file shortcuts. To validate the syntax that you entered in the autoexec file, click **Run**.
- I cannot seem to print anything from the SAS Web Editor.

  In order for printing to work in the SAS Web Editor, any pop-up blockers must be disabled for the site.
- I would like to save my HTML output as one file. How do I do that?

  To save your plots in your results in one file for sharing, submitting for review, printing, and so on, open an ODS PDF destination in your code and write the results directly into the projects space. For more information about the ODS PDF destination, see the *SAS Output Delivery System: User's Guide*.

  You can change the options for a default SAS Web Editor destination by specifying its ID. For example, to change the style that is displayed in the default results of SAS Web Editor, use the following code:

  ```
  ods html (id=web) style=sasweb;
  ods pdf (id=web) style=sasweb;
  ods rtf (id=web) style=sasweb;
  ```

- I cannot view my results or log after I click **Download as an HTML file**.

  If you click **Download as an HTML file** in the **Results** or **Log** tab and open the HTML that is produced in a browser other than the browser in which you are using for your active session, then you receive a 404 (file not found) error. Make sure that the browser that you have set as your default browser is the same one in which you are using SAS Web Editor.
- I cannot view my file shortcuts on my tablet. Why not?

  File shortcuts are not supported for the mobile version of SAS Web Editor.
- Does SAS Web Editor provide support for Java, ActiveX, and SVG device types?

  SAS Web Editor does not provide support for Java or ActiveX device types.

  When running on top of SAS 9.3, the SVG graph device type is supported only on one browser, Mozilla Firefox or with Microsoft Internet Explorer using an Adobe plug-in. Therefore, we do not recommend using the SVG graph device when the SAS Web Editor is connected to a SAS 9.3 server (the only environment currently available). When running the SAS Web Editor on top of SAS 9.4 (expected later in 2013), SVG should be supported on all web browsers.
- When using the Apple Safari browser, can I upload multiple files to a project at once?

Yes, if you are using Apple Safari 6 or greater. If you are using an older version of Apple Safari, then you can upload only one file to a project at a time.

- After generating a large amount of output (such as HTML), my browser seems to crash. What is happening?

  SAS Web Editor is not currently designed to support large amounts of output. The browser runs out of memory. This is more apparent with mobile browsers, which typically have less memory.

- Are there any search capability limitations within SAS OnDemand for Academics: Web Editor?

  Yes. Currently, search strings are not case sensitive and spaces are treated as part of the string, not as AND or OR variables.

- Can I edit my ODS graphics in the SAS Web Editor?

  You can download the ODS Graphics Editor directly from the SAS Web Editor. The SAS ODS Graphics Editor is an interactive graphical application used to edit and annotate ODS graphics that are created by a wide variety of SAS procedures. You can save the results as an image for inclusion in a report or as an SGE file that you can edit in the future.

  To download the stand-alone ODS Graphics Editor, complete these steps:

  1. Select **Download ODS Graphics Editor** from in the banner. The ODS Graphics Editor Download Packages page is displayed.
  2. Follow the instructions in the section named “Using a Stand-Alone ODS Graphics Editor” in the *SAS ODS Graphics Editor: User's Guide* to complete the installation and start using the stand-alone ODS Graphics Editor.

APPENDIX 1

Commonly Asked Questions for SAS OnDemand for Academics

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General Support 64

Commonly Asked Questions for SAS OnDemand for Academics

This appendix answers questions that apply to all SAS OnDemand for Academics software products. For help with specific products, see "Commonly Asked Questions" for the SAS OnDemand for Academics software that you are using.

General, Cost, and License

- How long is my license period?

  The license period lasts six months.
- What is the cost?

  It is free for professors and free to students in registered classes.
- Is SAS OnDemand for Academics accessible to users with disabilities?

  SAS is aware that academic and other institutions are required to satisfy the accessibility standards contained in Sections 504 and 508 of the Rehabilitation Act (29 U.S.C. 794d) with respect to their use of electronic and information technology. SAS has tested SAS OnDemand for Academics and SAS OnDemand for Academics: Enterprise Guide against relevant standards with the assistance of students who use assistive technologies.

Availability and Installation

- Who can use SAS OnDemand for Academics?

  SAS OnDemand for Academics is available only to college instructors and their students.
- What can I expect during the registration process?

  There are several parts to the registration process, so it is helpful to keep the following in mind:
  - The registration process uses a series of windows to guide you.
  - You will need access to your e-mail account during the registration process. When you begin registration, you will be prompted to enter an e-mail address.

Enter the e-mail address of an account that you can access easily while completing your registration.

- You will receive an e-mail during the initial registration process that you must open and act upon to continue. The e-mail prompts you to click a link to verify your e-mail address. Its primary purpose is to confirm that you are using a valid e-mail address and that someone else is not attempting to register you without your knowledge.

- Which Internet browsers can I use with SAS OnDemand for Academics?

  An Internet browser is required to use the SAS OnDemand for Academics Control Center (registration, course selection, and so on) as well as to download SAS OnDemand for Academics software. We recommend Microsoft Internet Explorer 7 (or earlier) for Microsoft Windows systems. Safari and Mozilla Firefox might be appropriate for Macintosh systems. Other browsers might work with the offering, but they have not been fully tested.

- I do not seem to have access to expected updates or features.

  You should occasionally clear your browser's cache to receive updates and for possible performance improvements.

- What is a SAS profile?

  A SAS profile is an account that you can create to access specific information and resources from the SAS website. If you are a current SAS user, then you might already have a SAS profile. If you are a new SAS user, then a SAS profile is created for you when you register for SAS OnDemand for Academics.

General Usage

- How do I log on to my SAS OnDemand for Academics Home Page?

  Your SAS OnDemand for Academics Home Page is part of the SAS OnDemand for Academics Control Center. The Control Center is used by students to register, purchase courses, and view course information.

  To log on to your SAS OnDemand for Academics Home Page, see "Access Your SAS OnDemand for Academics Account" for the SAS OnDemand for Academics software that you are using.

- I have used the correct logon values and I still cannot connect to the SAS server to perform processing. What is wrong?

  There are a few common reasons why you might not be able to connect:

  - You might have a brand new account. Your account will be activated within 15 minutes of registration, and then you gain access to the SAS server.
  - The SAS server might be temporarily down for maintenance.
  - Your account status might be pending.
  - Your SAS profile password might have expired. This password must be reset after 180 days (approximately six months). For more information, see "How do I reset my SAS Profile Password" at http://support.sas.com/ondemand/caq_new.html#pwreset.
  - Your SAS profile password might be too weak. See "What is a SAS Profile?" for the SAS OnDemand for Academics software that you are using.
  - Your account might have expired. Student accounts are valid for the duration of the registered course (plus a grace period to ensure that assignments can be completed).

  - The SAS server might be down at certain times for maintenance, testing, or enhancements. If you are unable to connect, then make sure that you have a working Internet connection. If you do and you still cannot connect, then try again at a later time. For more details, see "SAS Server Maintenance and Availability" for the SAS OnDemand for Academics software that you are using.

- My connection to the SAS server failed after I left my machine. What happened?

  An open connection to the SAS server will likely disconnect (time out) after one hour (or less) if the connection is idle (that is, you have not performed any processing). Many firewalls disconnect open sessions after an hour of idle time (or less). SAS recommends that you complete your work, save it, and then exit SAS OnDemand for Academics before you leave the computer.

- Can I collaborate with other users?

  Currently, there are a few ways that you can collaborate:

  - You can share files through network storage space that both parties can access (such as AFS or NFS mounted drives).
  - If an instructor chooses to store data on the SAS server for a course, then the students in that course can all share the same data by using the LIBNAME or FILENAME statement that the instructor provides.
  - You could consider using third-party tools, such as www.blackboard.com.

- Can I point to local SAS data sets or files using a LIBNAME or a FILENAME statement?

  No. The SAS server is unable to access or recognize the local drives of your PC. If you write a LIBNAME statement or a FILENAME statement that references a local directory path, then you receive processing errors. Can I store files on the SAS server?

  Only instructors have the ability to store data files on the SAS server. Once a data file has been stored on the SAS server, students can access it using an appropriate LIBNAME or FILENAME statement provided by the instructor.

- I have uploaded a SAS data set, but I cannot see or access it. What is wrong?

  Make sure that the SAS data set that you uploaded is named using all lowercase letters. Our hosted servers use UNIX; they do not recognize mixed or uppercase letters. If you have uploaded a SAS data set that uses mixed or uppercase letters, then rename the SAS data set to use all lowercase letters (with no spaces in the name) and then upload the SAS data set again.

- Is there a limit to the number of times I can submit SAS jobs to the SAS server?

  No. There is no limit.

- Can I use the SAS server with other SAS software that I have licensed?

  No. The SAS server has been configured to support only software client applications associated with SAS OnDemand for Academics.

- I received an error message when trying to create a folder on the SAS server. What is wrong?

  You might receive an error message such as this:

  "A call to the metadata repository failed. See details for more information."

  In this case, it is likely that you were trying to create a folder on the SAS server. This behavior is not currently supported because it is not possible to save your work on the SAS server. Instead, save any work to a local folder. When prompted

to save your work, select **Local Computer** instead of **SAS Servers** and then select the appropriate local directory.

General Support

- What should I do if I forget my password?

  You need to use a password to log on to SAS OnDemand for Academics or to connect to the SAS server (SAS Cloud) when prompted by SAS OnDemand for Academics: Enterprise Guide. In all cases, your password is the same as your SAS profile password. If you have forgotten your SAS Profile password, then follow these steps:

  1. Use the My Profile page to update your SAS profile password: https://www.sas.com/profile/user/login.htm.

     Note: Your password must meet the following criteria:

     a. It cannot be the name that you used to register or exceed two consecutive characters from that name. For example, if you registered as "Jonathan Smith," then you could not use either "Jonathan" or "Smith" and you could not include three consecutive characters such as "jon" or "ith."
     b. It must be at least eight characters in length.
     c. It must contain characters from three of the following four categories:
        - English uppercase characters (A through Z)
        - English lowercase characters (a through z)
        - base 10 digits (0 through 9)
        - non-alphabetic characters (for example, !, $, #, %)

  2. Access SAS OnDemand for Academics.
  3. Enter your e-mail address and use your updated SAS profile password when you are prompted to enter a password.
  4. When appropriate, use your updated SAS profile password (along with your SAS server User ID) to log on to a SAS OnDemand for Academics software application.

- If I have trouble with my software, how do I get support?

  Refer to the information in this manual under "Step 8. Finding Help for Common Problems" for the software being used in your course.

- When does my SAS OnDemand for Academics license expire?

  SAS OnDemand for Academics student licenses are good for the duration of the registered course (plus a short grace period to ensure that students can complete assignments).

- How can I check my account status?

  To determine the status of your SAS OnDemand for Academics account, do the following:

  1. Access SAS OnDemand for Academics Control Center: http://support.sas.com/ctx3/sodareg/index.html
  2. Enter your e-mail address and your SAS profile password and then click **Enter**.
  3. Review the **Status Indicator** at the top of your SAS OnDemand for Academics home page. Your status will be one of the following values:

- **Active** - You are a current user and your account is working properly.
- **Pending** - You have a user ID, but it is not yet active. If you are a student, then your status will change to active after you registered for a course license.

  If you completed the registration steps (including creating a course if you are an instructor or registering for a course license if you are a student) and you still see a status of **Pending**, then log off from the SAS OnDemand for Academics Control Center and then log back in. Repeat this step until your status changes to **Active**.
- **Password Expired** - Your SAS profile password has expired.
- **Disabled** - Your account has expired or the SAS Administrator has turned off your license in accordance with the terms of the legal agreement. If your account has expired, then you can enable your account again by registering for another SAS OnDemand for Academics course (if your instructor chooses to teach a course with SAS OnDemand for Academics).

APPENDIX 2

Learning Resources for SAS OnDemand for Academics

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Books 70

Learning Resources for SAS OnDemand for Academics

This appendix lists resources that are available for instructors and students on http://support.sas.com. Some resources are offered at no cost; others are available for purchase only.

Note: If any of the supporting materials identified in this appendix are not inherently accessible and you require an accessible format, then send an e-mail to `ondemandacademics@sas.com`. SAS will work with you to provide an accessible format.

Training and Usage Videos

The following videos have been designed to help you learn more about SAS OnDemand for Academics or to help you learn how to perform tasks quickly. The titles listed below are available at no cost at http://support.sas.com/ondemand/videos.html.

Professors

- Registering for SAS OnDemand for Academics: For Professors
- Creating a Course for SAS OnDemand for Academics: For Professors
- Uploading SAS Data Sets to the SAS Servers using FTP: For Professors
- Using a LIBNAME Statement: For Professors

Students

- Registering for SAS OnDemand for Academics: For Students
- Using a LIBNAME Statement: For Students
- Using a FILENAME Statement: For Students

e-Learning Courses

SAS provides many e-Learning courses (e-Courses) to help you learn how to use SAS software. After registering, you receive an e-mail with details about the e-Learning courses that are available to you. For more information about e-Learning, see http://support.sas.com/training/elearn/index.html.

Teaching Materials

For a list of available teaching materials from SAS, visit the SAS Global Academics website at: http://support.sas.com/learn/ap/tkit/.

Enterprise Guide Resources

The following lists the training and reference materials for SAS OnDemand for Academics: Enterprise Guide that are available at no cost.

Tutorial

If you are not familiar with SAS Enterprise Guide or want to learn more about using SAS Enterprise Guide, then you will find the free Getting Started tutorial helpful. As you complete the topics in this tutorial, you learn to use the main features of SAS Enterprise Guide.

After you have completed your registration and downloaded the software, you can access this online tutorial by doing the following:

1. Select **Start ▸ Programs ▸ SAS ▸ Enterprise Guide 4.2 OnDemand**. The Credentials Required window is displayed.
2. Enter your SAS server user ID. You can find this user ID on your SAS OnDemand for Academics home page.
3. Enter the password that is associated with your SAS profile account.
4. Select **OK**. The SAS Enterprise Guide window is displayed. You are now logged on to the SAS server.
5. Select **Tutorial: Getting Started with SAS Enterprise Guide** from the Welcome to SAS Enterprise Guide window.

Online SAS Enterprise Guide Demonstration

To see SAS Enterprise Guide in action, visit the following website: http://www.sas.com/govedu/edu/egdemo/itour_flash.html.

Online Practice Exercises, Statistics Information, and Sample SAS Data Sets

For instructions about how to perform all of the basic statistics that are taught in an introductory statistics class, a library of SAS data sets and a library of practice exercises, visit the SAS Online Resources for Statistics Education site at http://support.sas.com/learn/statlibrary/.

Product Documentation

SAS Enterprise Guide online documentation is available from the Product Documentation area on http://support.sas.com/documentation/.

Books

A number of books from SAS Publishing are available for SAS Enterprise Guide. You can use the SAS Bookstore website (http://support.sas.com/publishing/) to find the books, review portions of each book, and place orders. Use the site's search feature to locate topics or products of interest such as for SAS Enterprise Guide or Base SAS.

White Papers

You can access the following titles by visiting the following locations:

- A SAS Programmer's Guide to SAS Enterprise Guide at: http://supportexp.unx.sas.com/ondemand/pdf/SGF07_EG_for_Programmers.pdf
- Dynamic Projects in SAS Enterprise Guide - How to Create and Use Parameters at: http://supportexp.unx.sas.com/ondemand/pdf/SGF07_Parameters_in_EG.pdf
- Introduction to SAS Enterprise Guide 4.1 for Statistical Analysis: http://supportexp.unx.sas.com/ondemand/pdf/SUGI31_EGuide4-1Overview.pdf

Enterprise Miner Resources

Product Documentation

To access product documentation, sample data, and more, go to SAS Enterprise Miner from the Product Documentation area at http://support.sas.com/documentation/.

Books

A number of books from SAS Publishing are available for SAS Enterprise Miner. You can use the SAS Bookstore website (http://support.sas.com/publishing/) to find the books, review portions of each book, and place orders. Use the site's search feature to locate topics or products of interest such as for SAS Enterprise Miner or data mining.

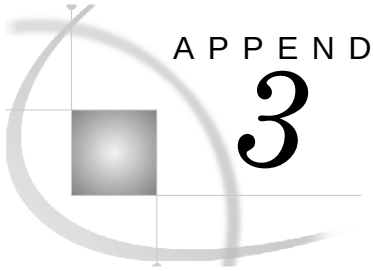
Forecast Server Resources

Product Documentation

To access product documentation, sample data, and more, go to SAS Forecast Server on the Product Documentation area at http://support.sas.com/documentation/.

Books

A number of books from SAS Publishing are available for SAS Forecast Server. You can use the SAS Bookstore website (http://support.sas.com/publishing/) to find the books, review portions of each book, and place orders. Use the site's search feature to locate topics or products of interest such as for SAS Forecast Server or forecasting.



APPENDIX 3

SAS OnDemand for Academics with JMP Software

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Step 4. Connecting to the SAS Server Using JMP *72*

SAS OnDemand for Academics with JMP Software

If you have purchased and installed JMP software (Version 8 or 9) in the United States, then you can use JMP to connect to the hosted SAS servers that are used by SAS OnDemand for Academics. This enables you to integrate JMP and SAS together.

To integrate with SAS using this method:

- register to use SAS OnDemand for Academics
- download sas.rutil.jar file and place it in the appropriate directory
- create a SAS server profile within JMP
- connect to the SAS server from JMP

Step 1. Registering to Use SAS OnDemand for Academics

This step needs to be performed only once. Perform the following steps. Note that your instructor must have registered a course before you can register.

1. Access SAS OnDemand for Academics.
2. Register as a student. Select the appropriate university and the course that is associated with your instructor.

During the registration process, a user ID and password are created for you.

Step 2. Downloading and Installing the sas.rutil.jar File

For JMP to work properly with the SAS OnDemand for Academics hosted servers, you must have the sas.rutil.jar file. This file is export controlled. It can be used only within the United States by United States citizens or legal residents of the United States. The file cannot be shared with any party to whom the United States prohibits access to the file.

1. Download the file from the JAR File Download Page at: http://support.sas.com/demosdownloads/sysdep_t1.jsp?packageID=000747

2 Place the file in the appropriate location.
   - If you are using a PC with the Microsoft Windows operating system, then place the JAR file in the following location:

     `C:\Program Files\SAS\JMP\9\jmptojava\9.3`

     (If your computer's hard drive is not labeled as "C," then replace `C` with the appropriate letter.)
   - If you are using a Macintosh PC, then do the following:
     1 Navigate to the **Applications** folder.
     2 Press **Control** and then click JMP 9 or JMP 10.
     3 Select **Show Package Contents ▸ Contents ▸ Frameworks ▸ jmptojava ▸ 9.3 ▸ jars**. Place the JAR file in this location.

Step 3. Creating a SAS Server Profile within JMP

This step needs to be performed only once.

1 Start JMP.
2 Select **File ▸ SAS ▸ Server Connections**.
3 In the SAS Server Connections window, select **9.2** from the **SAS Server Version** menu.
4 In the SAS Server Connections window, click **Metadata Server Profiles** to open the Manage Metadata Server Profiles window.
5 Click **Add**. Enter a profile name and description.
6 In the **Machine** field, enter **sas92cloud.sas.com**.
7 In the **Port** field, enter **18561**.
8 In the **User name** field, enter your SAS server user ID. This user ID is also displayed on your SAS OnDemand for Academics home page.
9 In the **Password** field, enter your SAS profile password.
10 In the **Authentication Domain** field, enter **DefaultAuth**.
11 Click **Save**.

Step 4. Connecting to the SAS Server Using JMP

This step should be performed anytime you want to connect to hosted SAS servers.

1 Start JMP.
2 Select **File ▸ SAS ▸ Server Connections**.
3 In the SAS Server Connections window, click **Metadata Server Profiles** to open the Manage Metadata Server Profiles window.
4 Click the name of the profile that you created for the SAS server.
5 Click **Connect**.

Note: To disconnect from the SAS server, return to the Manage Metadata Server Profiles window and click **Disconnect**.